

MANCHESTER: SOME NOTES ON ITS DEVELOPMENT.

By FRANK P. OAKLEY [A.].

A DESCRIPTION of Manchester in about the year 1800 is, of course, a necessary preface to a paper dealing with the development of the town during the nineteenth century. But this is not all that is required for a satisfactory starting-point. It is almost, if not quite as important to know—at any rate, in outline—something of the earlier history of the town. Manchester had at that time already become one of the largest and most important towns in the kingdom, and although its growth during the past hundred years has more than quadrupled its size, and completely changed its general appearance, yet its development during the period under consideration has in the main—at any rate as regards the central portion of the town—proceeded on lines derived from beginnings made long before A.D. 1800. Deansgate, for instance, is in its present form [fig. 7] about the most essentially modern street in Manchester, while in reality it is the oldest. It formed the direct connection between the old Roman station at Campfield and the later settlement on the banks of the Irk, and was in all probability part of the main Roman road from Chester through Manchester over Blackstone Edge into Yorkshire. William the Conqueror, not impossibly, passed along it in his sudden winter march from York to Chester in 1069, by which he finally crushed the last organised resistance to the Norman power. It is a curious fact, and worth at least passing notice, that whatever traffic has passed through Manchester from the earliest times to the present day has more or less followed the line of this road—that is, from east to west, or *vice versa*. To-day the only train service through Manchester is that between Liverpool and Yorkshire. The railways coming to the town from north and south all run into termini. It was the same with the coach-roads, and the roads before coaches. Yet for all this time Manchester has been a place of no little importance. It has, in fact, always been a local centre, and is so still. But the town is, and always has been, situated off any main through route of traffic, and as a consequence casual visitors have been few, although the means of communication with surrounding places seem to have been good. This has probably had but little to do with the development of the town, though its effect might perhaps be traced in other ways; but it is a peculiarity, and as such worth noticing.

The earliest authentic date in the history of Manchester is the year 79 A.D., when Julius Agricola established a Roman station at the junction of the rivers Medlock and Irwell. This was to all intents and purposes the beginning of Manchester, but it is a reasonable

supposition that some sort of town existed before the advent of the Romans. The site of this station is still known as Campfield, and is situated at the south end of modern Deansgate, about a mile to the south of the later settlement at the junction of the rivers Irk and Irwell, which afterwards became the centre of mediæval Manchester. It is said that the Romans established also a summer camp on the Irk. But, however this may be, at some time after their departure, in or about the year 425, the original settlement at Campfield was at any rate partly abandoned in favour of the more northerly position on the Irk. The migration was probably brought about by the incursions of the Danes—at whose hands, we know, Manchester, in common with the rest of the country, suffered severely—and the probable destruction of the old town by them. The new site was smaller, and, being practically made into an island by the construction of a moat or ditch joining the two rivers, was more easily capable of defence. It is not known if the moat was the work of the Romans, or formed when the later settlement was made. Its course is very plainly visible on the map of Manchester in 1800 [fig. 1], and in a rather less degree on that of 1900 [fig. 2], being marked by the line of Cateaton Street, Hanging Ditch, and Todd Street (originally Toad Lane). This settlement formed the nucleus of Manchester; and, if we consider Salford as part of Manchester, as for all practical purposes it is—at any rate as much as, or even more than, Southwark is part of London—it is from this centre that the town of Manchester has since expanded in all directions.

From Doomsday Book we learn that Mamcestre was at that time a manor, and that there were in it two churches—probably one at each of the above settlements—but their actual positions are uncertain. From this time onwards, until comparatively recent times, we hear very little of Manchester, though quite enough to justify the supposition that it was all the time a place of not inconsiderable importance. Thus in the reign of Edward I., Walter de Langton, Rector of Manchester, was appointed Bishop of Lichfield and Keeper of the Great Seal. In the same reign, William de Marcia, another Rector of Manchester, was Treasurer of England. In the reign of Edward III. many Flemish artisans settled in Manchester, and are said to have given a great impetus to the weaving industry, which was, however, undoubtedly established in the district before their arrival. The quality, weight, &c., of Manchester cottons (then probably woollens) were regulated by Act of Parliament in 1552. In 1538 Leland visited Manchester, and described the town as the “fairest, best buildid, quikkst, and most populus tounne of all Lancastreshire . . . and withoute the towne . . . yet be seene the dikes and foundations of Old Man Castel.” He also refers to Salford as a “large suburbe to Manchestre.” In 1540 Manchester received the doubtful privilege of being made a place of sanctuary. In the following year a special Act was passed transferring the privilege to Chester, for the reason that it was found prejudicial to “the great occupyings and good order” of Manchester, while Chester had “no such trade and merchandise, and has a strong gaol, mayor, and bailiffs.” At the time of the national arming against the Armada, Manchester, which then had a population of about 10,000, was required to furnish 38 arquebusiers, 38 archers, and 144 pikemen. In 1642 Manchester, having declared for the Parliament, was unsuccessfully attacked by the Royalists under Lord Strange. The town itself was fortified the next year, but not further molested. The fortifications were dismantled about ten years later. In recognition of the part played by the town in support of the Parliament, Cromwell accorded it the franchise, and two members were consecutively returned to Parliament. The town was disfranchised at the Restoration, and remained unrepresented until the passing of the Reform Bill in 1832.

In the next century the town seems to have been rather decidedly Jacobite. Several prominent citizens were “out” in the '15, taken prisoners at Preston, and afterwards executed for treason. In the '45, Charles Edward entered the town unopposed with his army, was pro-

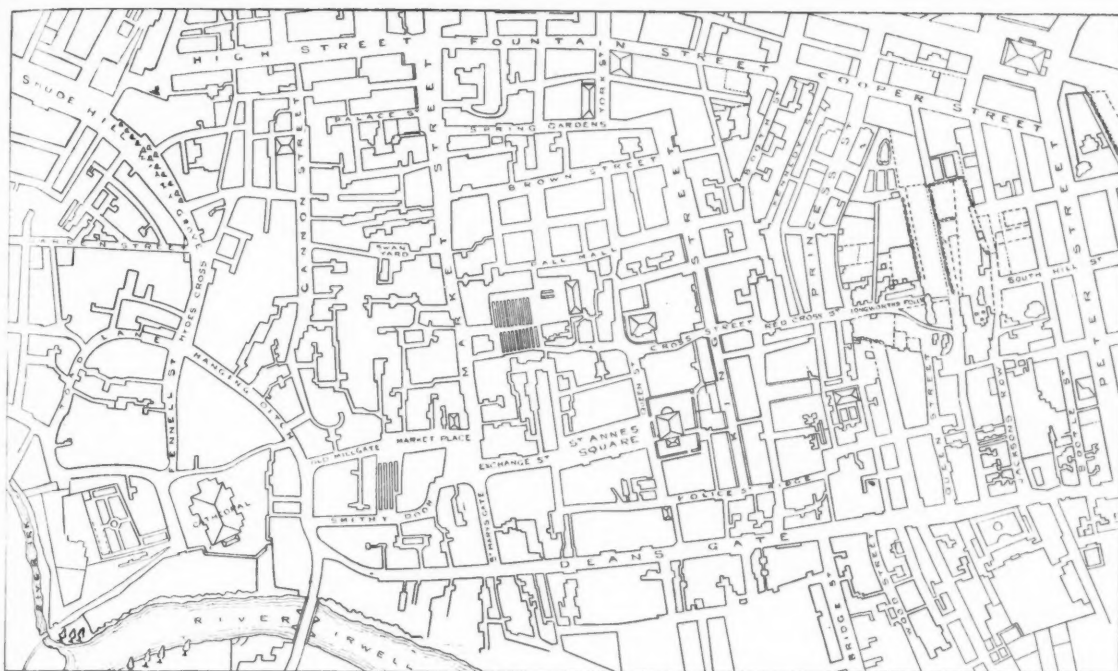


FIG. 1.—MANCHESTER IN 1800.

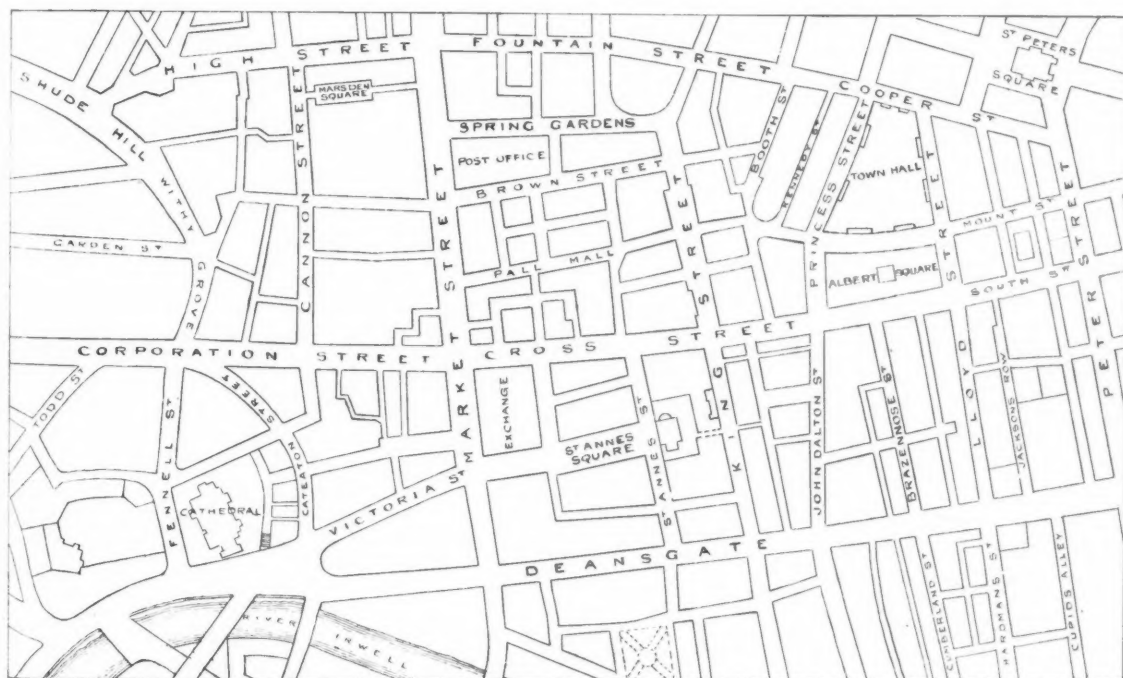


FIG. 2.—MANCHESTER IN 1900.

claimed King, and took up his abode for a short time at a house in Market Stead Lane. The Manchester Regiment—300 strong—was raised, and a levy of £5,000 made on the town.

During the remainder of the eighteenth century the town grew quietly and steadily in importance and size, its manufactures of all sorts increased rapidly, but most noticeably of all, perhaps, its means of communication with other parts developed and improved greatly—particularly communication by canal. At the close of the century Manchester was the centre of a system of canals by means of which merchandise could be received and distributed easily, cheaply, and it was no doubt then thought quickly, to all the most important towns of the country. The Bridgewater Canal—affording communication between Manchester and Liverpool—is well known as a Manchester undertaking, and, in addition to this, there were many



FIG. 3.—DR. WHITE'S HOUSE, KING STREET, MANCHESTER (1820).

others, considered in their day as triumphs of engineering skill, and occupying then much the same position that railways do now.

Having now traced in outline the growth of Manchester from the earliest times to its position of being one of the most important towns in the country at the beginning of the nineteenth century, it remains to give a short description of the town as it then was, and to describe its development down to the present day. Books might, of course, be written on the subject, but all that can be attempted in the present Paper is to indicate quite briefly the main lines of development and change that have taken place, with occasional short descriptions of some of the more important new buildings. An examination of the two maps printed herewith will probably convey a better impression of the changes made in the town than many pages of description. The first one, of the central portion of the town about the year 1800, is a pretty accurate copy of a map in the writer's possession published in 1795. The second, of the town as at present, is not absolutely accurate, having been redrawn to the same scale

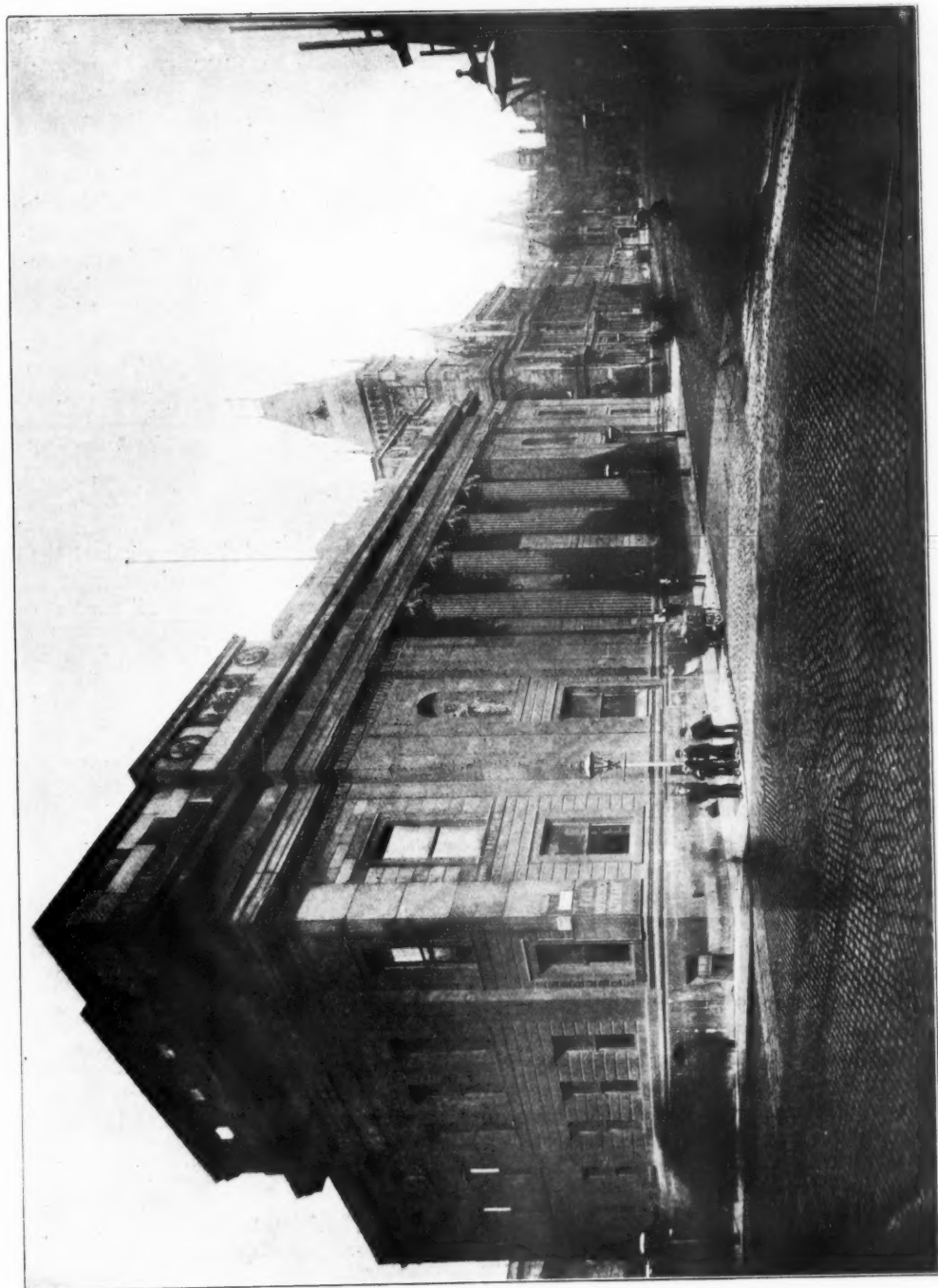


FIG. 4.—THE FREE REFERENCE LIBRARY.

J. Am'ler, Photo., 5, Market Street, Manchester.

as the old one from a small scale Ordnance map, but is in the main correct, and shows properly the main streets. It will be at once seen that the main changes have consisted in the wholesale sweeping away of courts and alleys, and the widening and straightening of the main streets. Only a few new streets have been formed, such as Corporation Street, Victoria Street and the road between the Cathedral and the river, and Albert Square. Almost the whole of the other alterations, complete and extensive as they are, have consisted in remodelling and improving what previously existed. The maps, of course, only show a small portion of the town, but that the most central, oldest, and most interesting. The growth of the town in other directions has been for the most part simply a matter of expansion and not of rebuilding and alteration, and is of no special interest except for its extent, which statistics may describe, and for an occasional important building here and there. The two reproductions of old prints of the Exchange [fig. 5] and of Dr. White's house [fig. 3]—both published about 1820—compared with the two modern photographs of the Exchange and Market Street [fig. 6], and of the Free Reference Library [fig. 4], show very clearly the alterations that have been made on those two particular sites. The old prints and the modern photographs are in each case taken from approximately the same point of view. The same sort of alteration has taken place over almost the whole of the portion of the town included in the map, and that all within the last sixty or seventy years.

The population of Manchester and Salford in 1801 was 89,755. (It was 703,500 in 1891, and is now probably about 800,000.) At the time of the first census the town was crowded together, the main roads crooked and ill-paved, badly lighted—often indeed not lighted at all, as the saving of oil seems to have been a simple and favourite method of retrenchment—and full of narrow, crooked, and insanitary courts and alleys. But it must also have been singularly picturesque and interesting. There were still standing, in both Manchester and Salford, numbers—it is said whole streets—of ancient black and white half-timbered houses, some few of which still remain, and many more existed even only a few years since. Then there was "th' Owd Church"—now the Cathedral, standing on a rocky bank above the Irwell, and the ancient Salford Bridge just below. There were several open markets, a market cross, pillory, stocks, and pond and ducking-stool. Besides this, there was what was then the modern portion of the town, consisting of good comfortable brick dwelling-houses—many with gardens. There were several in Spring Gardens—one of which has only just disappeared—and in King Street, of which Dr. White's house [fig. 3] was probably a favourable specimen, and one still remains in use as a bank manager's residence.

Many of the then existing houses had the top floor arranged as one large room, lit by a long narrow window, for the accommodation of the hand looms then in use. Many houses thus planned are still to be seen in the surrounding districts.

One feels a natural regret at the disappearance of these local characteristics, but it has been inevitable. The Manchester of 1800 would have been an impossibility in 1900.

The town's Charter of Incorporation was granted in 1838, and it is from that date that the modern and systematic development of the town really begins. Before that time the government of the town was vested in a borough-reeve, two constables, and other officials. Under them, the growth of the town seems to have been almost entirely unregulated and haphazard. Their province was to keep order in the town rather than to regulate its growth. But a serious beginning was made in 1821, when an Act was obtained for the widening of Market Street and King Street, and the work was carried out. The year 1834 saw the completion of the great Market Street improvement, the work having cost, from first to last, some £233,000. The formation of Corporation Street was commenced in 1845.

The lord of the manor possessed and exercised many rights in the town, and on several

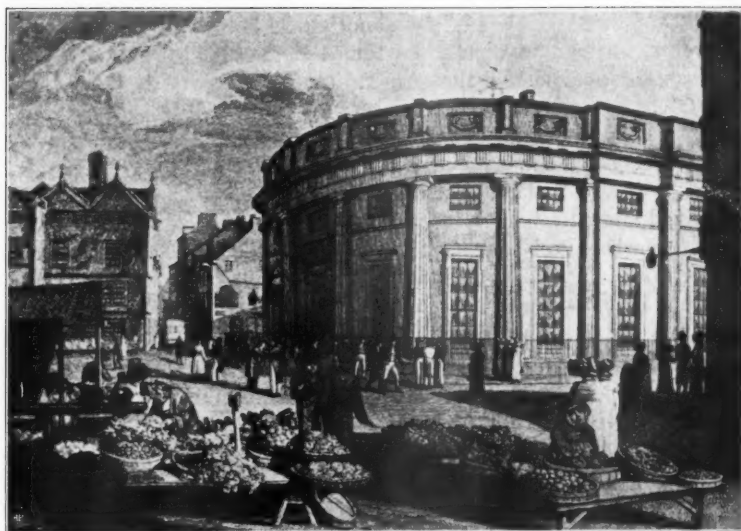


FIG. 5.—MANCHESTER EXCHANGE, 1820.



J. Ambler. Photo., 5, Market Street, Manchester

FIG. 6.—MARKET STREET, SHOWING THE TOWER OF THE EXCHANGE.

occasions assisted in its advancement, though perhaps somewhat *de haut en bas*. In 1808 Sir Oswald Mosley offered to dispose of his manorial rights to the town authority for £90,000. That body, however, declined to give more than £70,000, and the project fell through. In 1845 negotiations were resumed, and the Corporation ultimately purchased the manorial rights for about £200,000.

From 1832 to 1861 the municipality paved, drained, and flagged 1,578 streets. Ninety miles of main and forty-nine miles of cross sewers, and some 13,000 syphon traps were laid in connection with them. Salford paved, drained, and sewered 232 streets from 1844 to 1860. Nearly five hundred cellars were closed as unfit for human habitation from 1854 to 1861. The public parks—Peel Park, Queen's Park, and Philip's Park—were opened in 1846. In 1853 Manchester obtained its charter as a city.

The consecutive alterations of the Royal Exchange are interesting as being indicative of the growth of the town. The original building was erected in 1729 by the then lord of the manor at his own expense. In 1809 a new building—that shown in the illustration fig. 5—was opened, but had to be enlarged in 1839, and again in 1848. In 1866 it was decided to again rebuild it, more land was acquired, and the present building was erected and opened in 1879. The illustrations show the old and the new buildings from almost the same point of view, and also what is even more interesting, the respective widths of Market Street in about 1820 and at the present day.

In 1859 Manchester was created an assize town, and the Assize Courts in Strangeways were built from designs by Mr. Alfred Waterhouse, R.A.

Space admits of but little more than the bare mention of other of the city's public buildings. In a Paper read before the Institute in 1877 Mr. Waterhouse himself described the new Town Hall then recently completed from his designs. It is a triangular building, standing on an area of about 8,648 square yards. Each of its three fronts is between 300 and 400 feet in length. It has 314 rooms, and the total cost, including site, furniture, &c., was £1,043,838 17s. 4d.—figures which testify to the growth of the city's resources.

The Owens College, another of Mr. Waterhouse's buildings, contains chemical, physical, and physiological laboratories and class-room appliances reputed to be the finest in the kingdom. The library contains more than 32,000 volumes, and attached to the institution is the splendid museum presented to the Corporation by the Natural History Society.

The Free Library, originally established by public subscription in 1850-51, was handed over to the Corporation on the adoption of the Free Libraries Act in 1852. In 1877, the building in which the books were then housed being found unsafe, the old Town Hall in King Street was taken over for the purpose. This building, founded in 1822, and designed on the model of the Erechtheum at Athens, was erected at a cost of £40,000. The rooms formerly the Council Chamber, Mayor's Parlour, &c., were adapted for the occupation of the reference library. The circulating portion of the Library is distributed among numerous branch buildings in various parts of the city.

The City Art Gallery, formerly known as the Royal Institution, in Mosley Street, was founded in 1825, and erected at a cost of £30,000. It is Greek in style and was designed by Mr. (afterwards Sir Charles) Barry. It was presented to the Corporation by the former proprietors, with the condition that £2,000 per annum should be spent in the purchase of pictures.

An interesting structure is the Free Trade Hall in Peter Street, erected from Mr. Edward Walters' designs, and opened in 1856. It is in the Lombardo-Venetian style, and cost £40,000. Its Grand Hall will accommodate nearly 5,000 persons. The façade in Peter Street is of massive stonework with elaborate carvings. The spandrels of the arches are richly sculp-



FIG. 7.—DEANSATE, LOOKING NORTH TOWARDS THE CATHEDRAL.

J. Ambler, Photo. 5, Market Street, Manchester.

tured, displaying on shields the corporate arms of many of the chief towns in the district to which Manchester stands as the centre and nucleus.



J. Aubler, Photo., 5, Market Street, Manchester.

FIG. 8.—THE TOWN HALL, AND ALBERT SQUARE.

Mention should be made of the series of really fine churches built in and around Manchester by the late Mr. J. S. Crowther, author jointly with his then partner, Mr. H. Bowman, of *Churches of the Middle Ages*, published in 1845, and quite one of the best

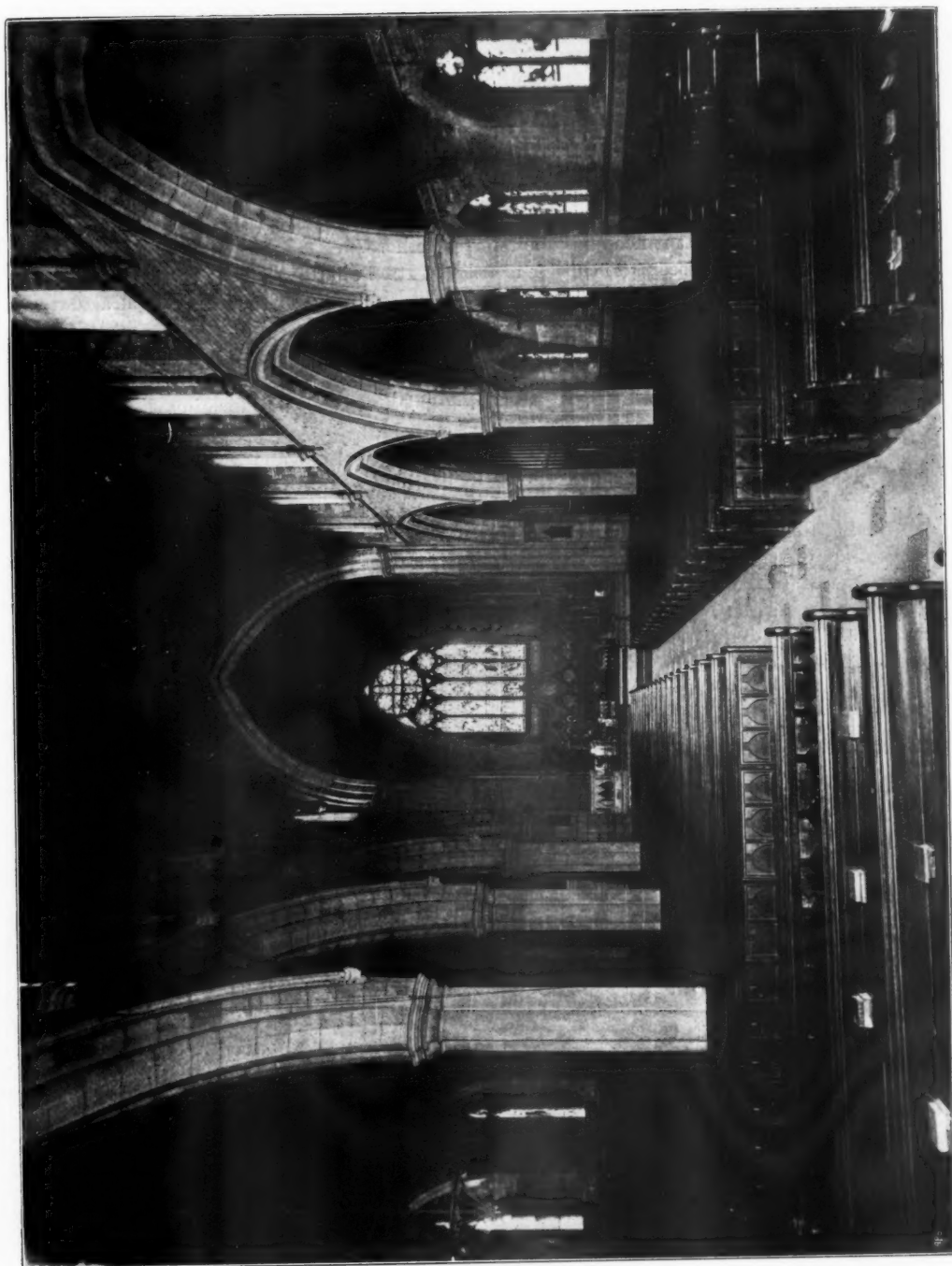


FIG. 9.—ST. MARY'S CHURCH, CRUMFSALL.

J. Audley, photo., 5, Mark Lane Street, Manchester.

of the many elaborate books published at the time of the Gothic revival. No particular originality can be claimed for these churches, but they are all thoroughly good, and show an intimate knowledge of the minutiae of Gothic work in their author, and if not original are at least stately, well-proportioned, and most admirably detailed. St. Alban's, Cheetwood; St. Mary's, Crumpsall [see fig. 9]; St. Benedict's, Ardwick; and St. Mary's, Hulme, are the best known of his churches in Manchester. There are many others in the town and district. His most important work was the restoration of the Cathedral, carried out by him with conscientious care and with great success.

The new Rylands Library, in Deansgate, has been so recently specially described and illustrated in the JOURNAL, that it need only be referred to here.

The Ship Canal, too, seems to call for mention. It can hardly be considered in itself an architectural development, but it is exercising a marked influence on the architectural development of the town. It has created a large traffic on the roads leading to the docks, and this has led to the necessity of widening and other improvements in many streets and districts. The new Whitworth Street—the latest important street development in Manchester—though nowhere near the docks, is directly attributable to the Canal, forming as it does a direct route from London Road to the Docks *via* Knott Mill.

Manchester is not yet a perfect city, but it undoubtedly lives and grows healthily, and surely, if slowly, improves. Compared now with what it was a hundred years ago, the town is convenience itself. Much remains to be done, and much is in hand. Its changes from time to time have been, and are, primarily utilitarian, as is but natural in a town that is first of all a business centre. But the value of the æsthetic side of its development has not been forgotten, and happily more and more attention is being paid to this value. The buildings of to-day show a marked improvement on those of say twenty years ago, and the improvement will doubtless continue. Granted the suppression of smoke—Manchester's worst feature—it is possible to look forward to a future of cleanliness and comparative beauty that may make Manchester a hundred years hence as different from the Manchester of to-day as present Manchester is from the town of 1800.



THE CHURCH OF ST. JOHN OF JERUSALEM (KNIGHTS HOSPITALLERS), CLERKENWELL.

By E. W. HUDSON [A.]

AMONG the remains of early ecclesiastical architecture left to us in London none are of greater interest than those appertaining to the great Priory of the Knights of the Order of St. John of Jerusalem. They consist chiefly of an undercroft of the choir; for the choir and nave which constituted the upper church have, with the exception of a few minor features, completely disappeared, chiefly through the incendiary action of Wat Tyler's rabble and the spoliation by King Henry VIII. and Lord Protector Somerset. An ugly superstructure was raised upon the ruins in the reign of Queen Anne, to serve as one of the fifty new churches then provided for London, and to this act no doubt we owe the preservation of so interesting a relic of architecture of the period *circa* 1100-85.

In the execution of certain alterations in the forecourt here during the past two months an important archaeological discovery has been made, in the uncovering of segments of ancient walling, forming part of a circle having a diameter, when complete, of about 65 feet, which, no doubt, was the dimension of a "Round" * nave of that figure, originally attached to the west wall of the choir, and opening therein nearly upon the same plan as obtained at St. Sepulchre's, Northampton, St.

Sepulchre's, Cambridge, Little Maplestead, Essex, and other churches on the continent of Europe built by one of the two military orders—Hospitalers and Templars—which took special charge of the Holy Land and pilgrims thereto.

Although there is a description of the tower by Stowe and a view of the east end by Hollar, I believe no description of the nave exists; but it seems to have been generally believed that the church was large in dimension and cruciform in shape. It is so depicted in a fanciful restoration by Mr. H. W. Brewer, and more recently in what purports to be a bird's-eye view of London in 1543 from a drawing in the Bodleian Library by Van den Wyngerde, but I understand St. John's is an entire interpolation by the publisher, and is not shown at all in the original.* Stowe describes the beauty of the tower, but not its position or shape; and it is hardly possible it could have been central, so that it was either at the west end or detached. I believe the evidence points to the latter notion, and that it was between the nave and north postern, the site of which is the present Jerusalem Passage. I do not know of any suggestion being offered that the nave was a

* The large bird's-eye views by Tapperell and Innes, 1849, and W. Newton, 1855, are also imaginative in respect of this church and priory.

* Northampton is the same diameter.

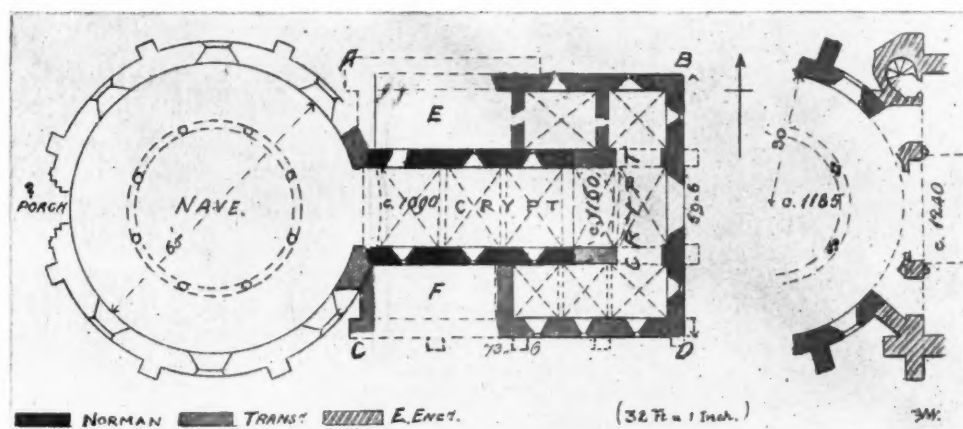


FIG. 1.

PARTIAL RESTORATION (NAVE), ST. JOHN'S PRIORY CHURCH, CLERKENWELL—c. 1090-1185.

TEMPLE.

A, B, C, D = Eighteenth century (present) church on lines of ancient choir.
E = Later chapel or cell with modern north wall. F = Not excavated.

ST JOHN'S PRIORY CLERKENWELL

NORMAN CRYPT & PART OF ROUND CHURCH

DISCOVERED MAY 1900

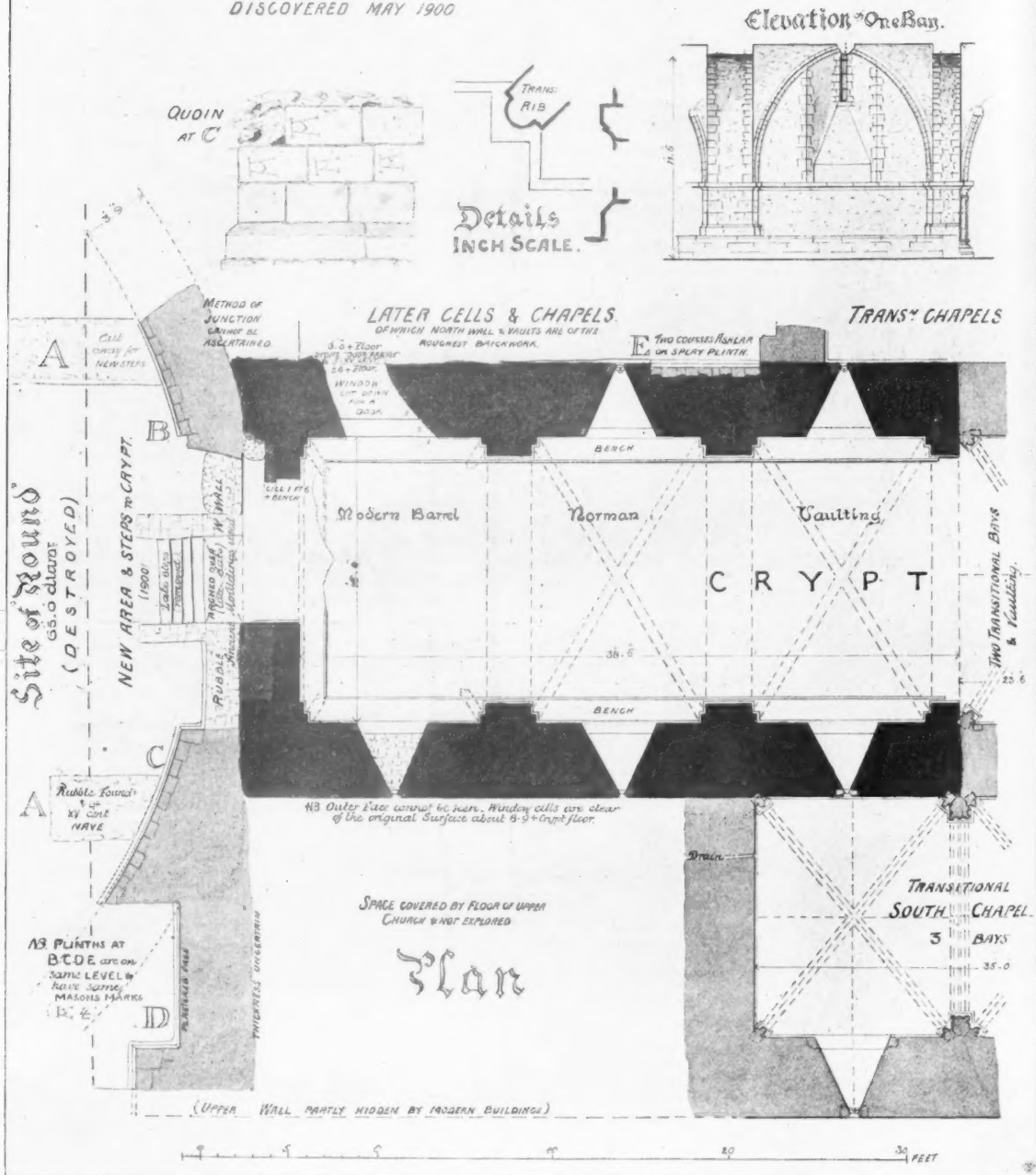


FIG. 2.

"Round;" and this view was not generally admitted on the discovery of the segment of it that remains, some antiquaries even denying that the Hospitallers ever used that form of temple. Although Dr. Freshfield bore the cost of search for further portions out in St. John's Square it was found that not only were there no traces of walling to complete the circle, but even the sand and gravel subsoil had been dug away. All but the 30 feet so attached to the choir had entirely disappeared, and that stood on the top of the stratum of sand and gravel. Reference to the plate, fig. 2, shows that even this segment was always broken into by the recessed entrance to the crypt. A few narrow, rough stone steps down (between wing-walls made of fragments of ancient stonework, both worked and rough), 4 feet wide, were *in situ*, as shown in fig. 3; but, being set centrally on the axis of the church, these could not be the original steps, for those centrally arranged would necessarily lead up to the choir floor, which was some four or five feet higher than the floor of the "Round." These steps may be as late as the seventeenth century, or have been put in after the destruction of the nave by Somerset, when Cardinal Pole patched up the remains and restored the services in Queen Mary's reign. The original way down was naturally at the side; the existing door-jamb in the north-west angle of the crypt corroborates this.

The floor of the "Round" is 8 feet 3 inches above that of the crypt. No bench existed next the wall, as at the Temple, but a splayed plinth course, 6 inches high, ran round it. On top of this are three to four courses of well-dressed ashlar, each rising about 6½ inches and averaging about 11 inches on face (see detail, fig. 2), the thickness with the rubble backing being about 3 feet 9 inches, which is the same as at the Temple Church. The stone is Reigate or similar formation and in excellent condition, masons' marks being as clear as when cut. The one resembling a capital <4 is well known in Syria and Switzerland, but, I believe, is not common in England. Both the masonry and the 3 feet of rubble concrete on which it stands are excessively hard and homo-

geneous, entirely differing from such jerry-work as the "double-skin and filling" construction found, *e.g.*, in the tower of St. John's, Chester. It is no wonder blasting was required for Somerset's destructive operations if the tower was equally well built. The "Round" was evidently



FIG. 3.

much later in date than the western part of the crypt, its material and workmanship sounder and neater, and it is doubtless part of the church consecrated by Heraclius in 1185, three bays of the crypt being to all appearance a pre-existing chapel or cell, partly sunk below the surface, and probably several years old when Blisset acquired the site for the establishment of this priory, if he

did so, as early as 1100.* Firestone is used in the Norman and Transitional work of the crypt; it shows plainly diagonal dressing, and presents there the bleached appearance due to long exposure. The narrow windows, which still retain an iron grille, but no provision for glazing, once opened into the outer air, but were afterwards cut off from it by the wide and overspanning superstructure. Whether this little Norman chapel had an upper story which the Knights connected with their "Round" nave, or whether they added this story (as some pier bases yet visible would suggest), is doubtful; but I have no doubt, from mouldings found in excavating for the new area steps, the widened choir was Transitional. The plate, fig. 2, does not show beyond the junction of the Norman with the Transition crypt, but the dotted lines on the small plan, fig. 1, show the position of the extensions, and for the sake of comparison the intersection of "Round" and choir at the Temple Church; but I adopt for St. John's the arrangement of eight columns, as at Northampton and Cambridge, in the restoration indicated, which I think clearly shows that one more is added to the number of round churches in England, making a known total of six†—four extant and two destroyed, viz. this of St. John and the earlier one built by the Templars in Holborn (between Chancery Lane and Southampton Row), of which no traces now remain. St. John's and the Temple have both passed through the period of narrow choir without aisles, but evidently St. John's was first by many years to have its choir widened from 17 to 52 feet, subsequently followed in the sister church by widening from 35 feet to 60 feet in 1240. The choir at Little Maplestead was never widened.

Yet another change passed over St. John's by the substitution of a rectangular nave for the "Round," which probably was destroyed in the great fire of 1381. In searching for the remainder of the "Round," foundations were uncovered passing across it in parallel lines 22 feet apart going west, which no doubt once carried piers of a later nave, which, if tradition can be trusted, was more than 200 feet long, and, allowing 11 feet for each aisle, would give nearly 50 feet as width. These foundations, being only 8 feet 6 inches thick, could not have carried crossing and tower piers. In the photo, fig. 4, the stooping figure is standing upon them where they abut upon the segmental masonry.

The straight wall forming the west end of the south aisle of the choir has also been uncovered as far as modern buildings admit, but enough to see a large portion of the buttress at the corner of the south wall, with the splayed base and the

broken edge of the circular wall [see fig. 5].* An acute angle is formed by the intersection with the outside face of the wall of the "Round," and it will be noticed that the splayed wall adopted at the Temple Church for the purpose of an

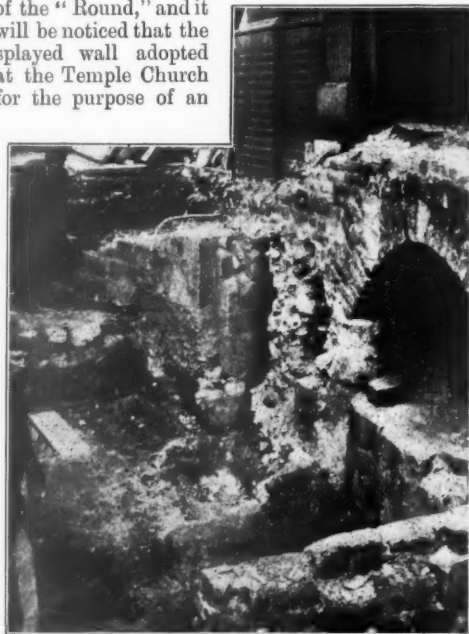


FIG. 4.



FIG. 5.

* A view of the interior of the crypt, from a drawing by Mr. W. Monk, is given in the *Builder*, 13th October 1894.

† Or eight, including Aslackby and Temple Bruer, now destroyed; and probably Bristol, Canterbury, Dover, and Warwick may have been "Rounds" also.

* The outer face of this bay above the splayed plinth is of rubble neatly plastered; the buttress is ashlar.

opening from the choir aisle has not been used here. So far no indications have appeared of any opening between the known choir aisles and the probable aisles of a later rectangular nave, though such an opening may have existed at a higher level. Reliable evidence of the existence of foundations of outer walls of nave aisles is also wanting at present.

It is hoped that the requirements of the Building Act will not be insisted on in regard to the width of the new steps down from the street level, so that all that is left of the circular walling may be exposed and preserved. St. John's has the advantage of a zealous churchwarden, whose antiquarian attainments and love for the fabric are such that not a single item of interest or particle of work bearing upon the history of the establishment is likely to be overlooked, and a collection



FIG. 6.

of worked and carved stone and other relics has been got together. I am much indebted to this gentleman, Mr. H. W. Fincham, for help in the inquiries I have prosecuted in the matter, and of which I am here unable by exigencies of space to give more than a short account of the latest discovery. The photographic reproductions of the walling and of Norman details [fig. 6] found worked into later masonry are in most cases from Mr. Fincham's negatives.

As an early example of vaulting the crypt is unique in London, and I have already drawn the attention of students to it in the *JOURNAL* (Vol. VI. p. 322) as a link of great importance in the study of the subject which has not received the attention of which it is worthy. To do it justice would require a separate paper.



9, CONDUIT STREET, LONDON, W., 25th Aug. 1900.

CHRONICLE.

THE FIFTH INTERNATIONAL CONGRESS OF ARCHITECTS. PARIS, 1900.

Report of the Secretary of the Royal Institute.

The Fifth International Congress of Architects took place at Paris during the week beginning Monday 30th July. Professor G. Baldwin Brown and the Secretary represented the Institute, and Messrs. H. L. Florence and R. Shekleton Balfour the Architectural Association.

The first meeting was held at 9.30 on the morning of the 30th July, at the Hemicycle of the Ecole des Beaux-Arts, where, indeed, all the meetings save the last took place. A considerable number of foreign architects assembled in the vestibule, and the first efforts of the Paris Committee of Organisation were directed towards making these acquainted with one another. This gathering together of representatives of so many different countries, from Sweden to Mexico, was not the least interesting feature of a most interesting week. Several Hon. Corr. Members of the Institute outside of France were present, most of whose names will appear in the course of this report. At an informal luncheon after the first meeting no less than ten Hon. Corr. Members were counted. To return, however, to the business of the first meeting, a bureau or general committee was constituted as follows:

1. Président: M. Alfred Normand (de l'Institut) [*Hon. Corr. M.*]; Vice-Présidents: MM. O. Courtois-Suffit, Frantz Blondel, Charles Lucas [*Hon. Corr. M.*]; Secrétaire-Général: Maurice Poupinel; Secrétaires: Georges Roussi, Alfred Newnham, Henry Pucey; Trésorier: Charles Barthelemy.

2. Vice-Présidents d'Honneur: M. Joseph Stübben [*Hon. Corr. M.*], pour l'Allemagne; M. Otto Wagner [*Hon. Corr. M.*], pour l'Autriche; M. Valère Dumortier [*Hon. Corr. M.*], pour la Belgique; M. E. Repullès y Vargas, pour l'Espagne; M. le Professeur D. Luis Salazar, pour les Etats-Unis mexicains; M. Van Brunt, pour les Etats-Unis de l'Amérique du Nord; M. le Professeur Baldwin Brown [*H.A.*], pour la Grande-Bretagne; M. Baumgarten, pour la Hongrie; M. Cannizaro, pour l'Italie; M. Cuypers [*Hon. Corr. M.*], pour les Pays-Bas; M. Paul de Suzor [*Hon. Corr. M.*], pour la Russie; M. Clason [*Hon. Corr. M.*] pour la Suède.

3. Secrétaires généraux honoraires : M. Bohnstedt, pour l'Allemagne; M. Maukels, pour la Belgique; M. Urioste y Velada, pour l'Espagne; M. Totten, pour les Etats-Unis d'Amérique; M. Grimm, pour la Russie; M. Lallstedt, pour la Suède; M. W. J. Locke, pour la Grande-Bretagne.

After which the meeting was adjourned.

In the afternoon, at 2 o'clock, the attention of the Congress was directed to an exhibition of drawings, got together under the direction of the Ministre du Commerce et de l'Industrie, of architects of the last 140 years. They were admirably hung by MM. Charles Lucas and Gaston Daunay.

The afternoon sitting was occupied by a Paper by M. Georges Harmand, on "Copyright in Architectural works." M. le Comte de Suzor [*Hon. Corr. M.*], of St. Petersburg, was in the chair. The result of the Meeting was the following unanimous resolution:—

"The Congress, in accordance with the resolutions passed at the first International Congress on Artistic Copyright, held at Paris in 1878, at the three last International Congresses of Architects, held at Paris in 1878, 1889, and Brussels in 1897, and at the various congresses of the International Literary and Artistic Association, held in many cities from 1887 to 1900, which tend to grant to works of architecture the same protection as to works of painting, sculpture, and the other arts of design;

"Considering that architectural designs, comprising plans, elevations, sections, details of exterior and interior portions of buildings, of decoration, &c., constitute the original of the Architectural Work, and that the constructed edifice is only the reproduction thereof;

"Considering that the Architectural Work, like the work of painters and sculptors, has a right to legal protection, irrespective of the author or his artistic merit, when it presents a character of originality which gives it individuality;

"This Congress confirms the resolution that, in all legislations and international conventions, architects should enjoy the same copyright for their works as is granted to painters, sculptors, and other artists, and regrets that the 'Acte de Paris, 1896,' has not been able, by reason of the legislation of two of the countries (Germany and Great Britain) belonging to the Berne Convention, to grant to architects complete and uniform protection throughout the extent of the Union, and further desires that this protection be completely realised in the approaching revision of the Berne Convention."

In the evening a pleasant conversation was held at the new Palais d'Orsay, which was attended by some 150 persons.

The next day, Tuesday, was occupied with a charmingly-arranged excursion to Chantilly, the château which the late Duc d'Aumale filled with treasures of art and presented to the French Nation under the name of the Musée Condé. Monsieur

Daumet [*Hon. Corr. M.*], the architect of the new portions of the château, conducted the party of 250 through the building, and afterwards, at the Hôtel du Grand Condé, where refreshments were provided, the health of the Master, proposed by M. de Suzor, was drunk amid a scene of great enthusiasm.

The sitting of Wednesday morning, under the chairmanship of Herr Stübgen [*Hon. Corr. M.*], of Cologne, was devoted to the discussion of "Architectural Education." Monsieur J. J. Pillet (Paris), Professor Otzen [*Hon. Corr. M.*], of Berlin, and Mrs. Frank Fuller, Architect, of Chicago, presented communications. Discussion of the subject was continued at the afternoon meeting, M. Valère Dumortier [*Hon. Corr. M.*], of Brussels, in the chair, and finally the following resolution was passed:—

"That as to superior education, the higher study of architecture receive, in a liberal sense, the greatest possible development in every country."

On Thursday morning, Mijnheer Cuyper [*Hon. Corr. M.*], of Amsterdam, in the chair, "The Preservation of Ancient Monuments" came under discussion. Mijnheer Cuyper, Herr Bohnstedt (of Minden), and Baron Geymüller [*Hon. Corr. M.*] (of Baden-Baden) spoke on the subject, the latter referring in terms of high praise to the two Institute publications. The resolution passed was as follows:—

"That in all architectural schools of every degree, place be given to the study, no matter how summary, of the monuments of the past, and to the means of guarding them from destruction; leaving the care of their preservation or their restoration, and works necessary thereto, to special commissions."

At the meeting on Thursday afternoon the chair was taken by Señor Repullès y Vargas, of Madrid. Two subjects were discussed. The first was "*Le titre d'Architecte dans divers pays*," which is practically the same as "Architects' Registration," and the discussion resulted in the following resolution:—

"That Governments take measures to protect and ensure respect for the title of 'Architect,' by reserving it for the future, and without retroactive effect, to architects provided with a proper certificate, by forbidding others to use it, and by putting it within the reach of all, by means of the diffusion of architectural education."

The other subject was "Artisans' Dwellings," as to which communications were made by M. Lucas [*Hon. Corr. M.*], of Paris, M. le Cœur, of Rouen, M. de Morsier, of Geneva, and M. Maukels, of Brussels.

At the request of the Bureau, the Secretary of the Institute gave a brief verbal account of the Congress held in London from the 18th to the 28th June.

On Friday morning, under the chairmanship of Mr. H. L. Florence, Messrs. Ducloux (France)

and W. Jenney (Chicago) read communications on "Steel Construction," and Mr. G. D. Totten (Washington) read a paper, illustrated by diagrams, on "Tall Buildings in the United States."

The afternoon of Friday was devoted to a private function of the Société Centrale des Architectes Français, to which the foreign delegates were invited. This was the exceedingly interesting annual distribution of *récompenses*. Not only were medals, gold, silver, and bronze, awarded to various architects for meritorious buildings erected and for services rendered to the Society and the general interests of the profession, but to students, to trusted chief assistants, to clerks of works, to honourable contractors, to builders' foremen, masons, fitters, and other artisans. The Société Centrale is to be congratulated on the successful effort it is making to make its influence felt through the whole of the building trade in France.

The last meeting of the Congress, M. A. Normand [*Hon. Corr. M.*], President, in the chair, was held on Saturday morning at 9 A.M., at the Palais des Congrès in the Exhibition. The following general resolution was passed:—

"That the delegates of the various Governments represented at the Congress take steps to approach their respective Governments with a view to carrying into effect the various resolutions passed by the Congress." It was further resolved that the next, the sixth, International Congress of Architects be held at Madrid in the Spring of the year 1903.

The banquet of the Congress was held in the evening at the Hôtel Continental, and was attended by nearly two hundred persons. The President called upon the Secretary of the Royal Institute, among several other speakers, to speak on behalf of the Institute. The Secretary, on behalf of the Institute and the British delegates, thanked the French architects for their kind welcome, and took the opportunity of publicly expressing the thanks of the Institute to MM. Bouvard and Ch. Lucas for the great pains they had been at to form the fine collection of drawings which illustrated Monsieur Lucas's Paper on the Buildings of the Paris Exhibition, read before the Institute last session.

Members of the Congress had been invited to a reception by the Municipality of Paris at the Hôtel de Ville, and to an afternoon garden-party at the Elysée by the President of the Republic; but owing to the assassination of the late King of Italy both these official entertainments were countermanded.

Besides the excursion to Chantilly, visits were made to the Sorbonne (members being conducted over the building by the architect to the edifice), the magnificent new Gare d'Orléans on the Quai d'Orsay, and to various special features of the Exhibition.

The Fifth International Congress of Architects, Paris 1900, has been completely successful from the professional as well as from the social point of view. By way of comment, however, upon the comparison that is so often drawn between the different positions of architects in England and in France, it is a matter of some gratification to have noticed that the Congress lately held in London attracted at least as much public attention in England, through the press and the interest of highly-placed public men, as the International Congress in Paris has done in France.

The following are abstracts of the communications presented to the Congress on "The Teaching of Architecture" and "The Preservation of Ancient Monuments":—

L'ENSEIGNEMENT DE L'ARCHITECTURE.

PROJET D'ORGANISATION DE L'ENSEIGNEMENT DE L'ARCHITECTURE DANS UN GRAND PAYS, par J.-J. PILLET, architecte, professeur à l'École nationale des Beaux-Arts.

Résumé.—L'auteur suppose qu'une grande nation de quarante millions d'habitants, après des tâtonnements nombreux, a fini par réaliser chez elle l'organisation qu'il propose; il la décrit en la comparant à l'ancien état de choses, et ne visera aucune doctrine d'art; il ne veut s'occuper exclusivement que des questions d'organisation, soit administrative, soit pédagogique.

Le rapport se divise en quatre parties:

I. *Étude de la nation, de ses ressources, de ses besoins.*—L'enseignement dans la métropole; les ressources intellectuelles, artistiques, techniques; la statistique de la profession du bâtiment.

II. *Les Écoles secondaires d'architecture.*—Écoles régionales des beaux-arts; écoles secondaires d'architecture; phases de création d'une école secondaire d'architecture; enquêtes, décret, règlement d'administration et de discipline; contrôle des études, programme; budget, recrutement des professeurs, inspection, avancement.

III. *École des hautes études architecturales.*—Admissions, entrées de droit, entrées au concours, programme des épreuves d'admission, enseignement intérieur: 1° scientifique, 2° technique, 3° artistique. Rapports avec les ateliers extérieurs, les écoles secondaires.

IV. *Cours complémentaires pratiques.*—Leur création due à l'initiative de l'État, des villas, de sociétés d'architectes, de particuliers. Leur organisation: ressources, budget. Programme: conférences, sur la série de prix, principes de la rédaction d'une série, du mètre, de la vérification; conférence particulière sur chacun des corps de métiers de la série de prix; conférence sur la résistance des matériaux et la stabilité, la machinerie des diverses entreprises, etc.; l'hygiène des maisons, législation, contentieux, gérance, etc.

ÉTUDE DU MOUVEMENT ARTISTIQUE DES DIX DERNIÈRES ANNÉES, par le Professeur JOHANNES OTZEN, Geheimerrath, Sénateur de l'Académie Royale des Arts de Berlin.

Résumé.—M. le professeur Otzen constate qu'un mouvement d'opinion très vif s'est produit tendant à modifier l'art soit par réforme, soit par des moyens révolutionnaires. Il passe en revue les grands exemples historiques de transformations de l'art, les prodromes, leurs causes, leur processus. La poussée irrésistible des aspirations immanentes des masses, l'action directe de quelques hommes de génie, action sensible, celle-là surtout à l'époque de la Renaissance.

Il souligne la corrélation entre les mouvements littéraires, les révolutions politiques et les évolutions artistiques; aux

revendications pour la liberté individuelle fait suite le développement des personnalités; on sent l'influence discutée de gens curieux et instruits, non architectes, éprouvant le besoin d'écrire des livres à propos de tout, s'en prenant à l'architecture, cherchant du nouveau, toujours du nouveau; il y a aussi l'influence de la manie très humaine du changement; enfin l'originalité exacerbée par un culte exagéré du moi! Il y a lieu de juger sévèrement les petites et les mesquineries qui en résultent.

Les architectes ne doivent pas s'abandonner au courant; ils doivent se proposer un but; dégager le bon d'avec le mauvais; il faut que leur œuvre ait une signification, car on commence à comprendre le langage de l'architecture.

La Société des architectes de Berlin fait des efforts dans ce sens en provoquant des études, de véritables thèses d'art pour poser à nouveau les grands principes fondamentaux, qu'il est funeste de négliger, et pour les rappeler aux artistes troublés, pour mettre un terme au désarroi actuel des esprits.

Il faut un certain courage pour les proclamer. Les œuvres d'architecture, en tant qu'œuvres d'art, doivent s'affranchir des forces matérielles; tout en employant la matière, elles doivent l'idéaliser.

Il n'est pas bon d'affubler d'oripeaux historiques, d'étrangler dans un vêtement de style déterminé une construction utilitaire, ni de sacrifier tout à l'utilitarisme: on peut, en combinant les formes historiques avec l'utile moderne obtenir une œuvre harmonieuse.

Le mensonge architectural, comme toute tromperie, est condamnable.

L'ornementation n'est qu'une conséquence ou un accessoire, et non le principal.

Il y a des lois d'esthétique dont on ne peut s'affranchir complètement sans commettre des sottises, quel que soit le nom prétentieux dont on cherche à les couvrir; l'excuse de la mode n'est pas valable: ces lois laissent assez de liberté à l'artiste dans ses créations pour ne pas l'entraîner à de véritables monstruosités, à un individualisme déréglé; elles n'empêchent pas le retour à l'étude de la nature en tant que source de tout art.

Il ne faut pas oublier qu'il n'y a rien d'absolument nouveau, et que les périodes créatrices de l'art se sont toujours basées sur la tradition.

Il est bon de vouloir s'affranchir du formalisme sans vie de la dernière période décennale du siècle; cela doit se faire par une meilleure compréhension de nos ressources et de la tradition; point n'est besoin de dynamite d'ailleurs: l'anarchiste détruit, il est incapable d'édifier; il y a des anarchistes en architecture, et même, ce qui est plus grave, des hommes de talent qui s'abandonnent à un véritable déréglage, à un dévergondage lamentable.

La jeunesse est prompt à se lancer à la suite des nouvelles théories, vers des formes nouvelles, elle fuit la pédanterie morose: ceci trace le devoir du professeur; il faut qu'il élève son cœur; qu'il se fasse une méthode nouvelle, et qu'il donne l'exemple soit comme éducateur du peuple par ses monuments, soit comme éducateur de la jeunesse par les leçons qu'il professe dans les écoles d'architecture ou dans son atelier: la tâche qui lui incombe est difficile à remplir, mais elle est belle.

"LA FEMME ET L'ARCHITECTURE," par MME. FRANK FULLER (de Chicago), Délégué officiel du Gouvernement des États-Unis d'Amérique.

Depuis nombre d'années, les femmes ont étudié et réussi dans l'étude des arts décoratifs: elles ont reconnu que les arts décoratifs sont à l'architecture ce qu'est la vigne ombreuse à l'arbre majestueux.

À l'époque préhistorique, ce fut la femme qui, la première, pour abriter ses petits, éprouva le besoin d'une protection contre les éléments et se réfugia dans les cavernes. Dans la confection des huttes comme dans celle des tentes elle prit une part active, souvent prépondérante: il en fut

de même dans le métier de potier; récemment encore, au Groenland, on vit les femmes mettant en œuvre les matériaux d'habitations fortifiées, d'autres construisant des bateaux, ainsi dans l'ordre naval, militaire et domestique, on a vu la femme suppléant à toutes les demandes de l'architecte; et même le wigwam indien est en entier, principal et accessoires, l'œuvre de la femme indienne; à l'époque des tentes, l'œuvre de la femme domine encore. Il est vrai que Viollet-le-Duc, dans son *Histoire de l'Habitation*, ne leur fait aucune part; cependant l'influence de quelques-unes se fait sentir: ainsi dans le palais de Salomon; puis, plus directement, Marie de Médicis, Blanche de Castille.

C'est en 1880 que l'Institut de technologie, aux États-Unis, admit les femmes à suivre les cours: il y en eut d'abord trois; actuellement, il y a quinze femmes architectes. C'est en 1899 qu'une femme, Mlle. Charles, réussit à se faire admettre à l'Institut royal des Architectes britanniques.

Il y a deux arguments opposés aux femmes: 1° Elles déroberaient aux hommes le moyen de gagner leur vie; 2° elles ne pourraient pas surveiller les travaux extérieurs. Mme. F. Füller écarte comme méprisables par sa banalité le premier argument; quant au second, les grands architectes ne montent guère à l'échelle eux-mêmes; mais d'autre part, en Autriche, ce sont encore des femmes, dans certaines localités, qui, par les échelles, montent à dos les matériaux. Concluez.

En Amérique, des examens très sévères sont à subir par l'architecte pour l'obtention du diplôme; on ne l'a jamais refusé à une femme après qu'elle eut subi avec succès l'examen public. Il y a dix écoles et universités ayant des sections d'architecture; sept de celles-ci admettent indifféremment les deux sexes à leurs cours. Les femmes y montrent beaucoup d'habileté et de puissance d'assimilation; les professeurs ont foi dans leur capacité et leur attribuent beaucoup d'avenir, dans les travaux de cabinet surtout.

Il y a cependant des architectes-femmes qui s'adonnent à la pratique et construisent maisons, clubs, cottages et autres, et des appartements modèles; là, elles semblent dans leur véritable domaine, dans leur élément, et y ont de grands succès.

Mais ce n'est pas tout, et à l'Exposition de Chicago, une jeune fille a été l'architecte du "Bâtiment des femmes"; c'était Mlle. Sophie Hayden, de Boston, qui avait obtenu le 1^{er} prix au concours public pour ce bâtiment: elle a reçu les honoraires d'architecte à 5 p. 100, beaucoup d'éloges et de félicitations; elle venait d'obtenir le diplôme de Technologie de Boston. Une excellente école, dit M. Ph. Spiers du R.I.B.A., fondée sur le meilleur système de France, qui encourage fortement les étudiants à venir passer quelques années, pour compléter leurs études, en Europe, surtout en France.

Le public hésite encore à s'adresser aux femmes pour les grandes affaires; mais il accepte leur influence pour l'habitation particulière.

Mme. Frank Fuller, en terminant, souhaite que l'architecture, tout en respectant le grand enseignement de l'expérience, ne s'attache pas trop à l'inspiration antique et païenne, à celle de l'époque où l'homme était esclave et la femme asservie, ni à celle du moyen âge, époque de violence, de fanatisme et d'intolérance. L'architecture devrait s'inspirer du sentiment moderne, la liberté de l'homme, la dignité de la femme, le respect du travail, l'amour de la justice et de la paix universelle.

DE LA CONSERVATION DES MONUMENTS HISTORIQUES:

Communication de M. Alfred Bohstedt, Conseiller d'Architecture à Minden en W.

Le dernier Congrès international des architectes, tenu en 1897 à Bruxelles, a unanimement voté une proposition de

M^r Harmand, conseil juridique de la Caisse de défense mutuelle des architectes français, ainsi conçue : —

“ Le Congrès émet le vœu que les dispositions les plus complètes soient prises dans tous les pays pour établir l'inventaire, assurer la conservation définitive et le classement des monuments et des objets d'art qu'ils contiennent, ainsi que des découvertes faites par suite de fouilles.

“ Le Congrès souhaite que l'unification des législations existantes soit faite dans le plus bref délai pour assurer ce résultat.”

Tout en nous associant entièrement à la première partie de cette résolution, nous doutons qu'il y ait des chances de faire accepter la dernière partie par les gouvernements. Ceux qui possèdent une loi et un service des monuments historiques bien organisé se refuseraient à les modifier, et les autres tiendraient à faire encore mieux.

Cependant, on pourrait bien établir certains principes généraux qui se trouvent réalisés dans les meilleures lois existantes, et qui pourraient être introduits dans toute nouvelle législation sur les monuments historiques. Votés et appuyés par un Congrès international de haute autorité et de parfaite compétence en la matière, ils serviraient à vaincre l'opposition, les réticences et les préventions que les projets de loi relatifs à la protection des monuments historiques ne manqueraient certainement pas de rencontrer dans le public et dans les corps législatifs. Car bien que l'idée de la conservation des monuments ait conquis beaucoup de terrain au cours de ce siècle, il y a toujours, même parmi les plus instruits, nombre de gens comprenant mal que ces monuments sont un précieux héritage du passé que nous avons le devoir de léguer intact aux futures générations.

Jusqu'à présent, la loi française du 30 mars 1887 est la plus complète et n'a été surpassée par aucune loi, même plus récente, d'un autre pays ; elle offre toutes les garanties d'une protection réelle et efficace des monuments.

Cette loi est basée sur le classement.

On ne réussira jamais à donner une définition assez précise et concise de ce qu'il faut entendre par “ monument historique.” La loi hongroise du 24 mai 1881 dit : “ Sous la désignation monument d'art on entend toute construction sur ou sous terre et ses dépendances ayant la valeur d'un monument artistique ou historique.” Au fond, ce n'est qu'une périphrase, ce n'est pas une définition. Donc, le seul moyen d'indiquer les objets qu'il faut placer sous la protection de la loi, c'est de les énumérer, d'en dresser une liste complète basée sur un inventaire général de tous les monuments historiques et artistiques du pays.

C'est là un travail énorme dans un pays qui possède une longue histoire. Heureusement, dans la plupart des pays civilisés, on s'est mis à l'œuvre depuis longtemps, et dans beaucoup de pays il existe même un service régulier de relèvement des monuments dont le travail est assez avancé.

L'inventaire achevé, les monuments seront classés, c'est-à-dire déclarés monuments artistiques et placés sous le contrôle de l'Etat. Cette mesure législative, touchant aux droits de la propriété privée, n'est pas facile à régler, mais elle a donné, en France, les meilleurs résultats. Elle est, du reste, prévue dans la proposition de M^r Harmand. Le classement doit comprendre tous les monuments et objets d'art d'origine nationale ou découverts sur un territoire national. Une liste restreinte, au contraire, comme celle de la loi anglaise de 1882 (*Ancient Monuments Protection Act*), peut constituer un danger, parce qu'elle met hors de la loi tous les monuments non classés.

Donc le classement est à adopter comme principe général.

Pour la conservation proprement dite des monuments, les sociétés historiques et archéologiques allemandes, réunies en Congrès l'année passée, ont pris les résolutions suivantes, qui sont également tirées de la loi française, et qui pourraient être généralement acceptées.

1^o Un monument immeuble d'un intérêt artistique ou historique, appartenant à l'Etat ou à une corporation dans le sens du droit public, ne pourra être détruit ni être l'objet d'un travail de restauration, de réparation essentielle ou de modification, ni être sciemment abandonné à la ruine sans le consentement de l'autorité chargée du contrôle.

2^o Un objet mobilier d'un intérêt artistique ou historique, appartenant à l'Etat ou à une corporation dans le sens du droit public, ne pourra être aliéné, restauré, réparé d'une façon essentielle ni modifié sans le consentement de l'autorité chargée du contrôle.

3^o Des fouilles archéologiques ou des recherches quelconques ne pourront être entreprises, sur des terrains appartenant à l'Etat ou à une corporation dans le sens du droit public, sans le consentement de l'autorité chargée du contrôle.

4^o Des objets mobiliers d'un intérêt artistique ou historique appartenant à un particulier et en péril sous leur propriétaire actuel, ainsi que des terrains appartenant à un particulier, qui contiennent des monuments, immeubles ou mobiliers d'un intérêt archéologique, pourront être expropriés.

Ajoutons qu'il faut considérer comme un péril, non seulement les actes indiqués dans l'article 2, mais aussi l'exportation hors du pays. Si l'Etat ne peut interdire toute aliénation d'un objet d'art sans porter atteinte aux droits de la propriété privée, il peut se réserver le droit de préemption, si cet objet est d'origine nationale ou d'un intérêt national. Le principe se trouve déjà dans la fameuse *lex Pacca*, de l'ancien Etat de l'Eglise, et dans la loi grecque du 10/22 mai 1834. Naturellement, cette règle ne peut pas être étendue à toutes les œuvres des anciens maîtres nationaux ; car on ne voudrait pas anéantir le commerce des antiquités et des objets d'art, qui a le grand mérite d'avoir sauvé beaucoup d'objets qui, autrement, eussent été perdus, et d'avoir contribué à l'étude de l'art ancien ; on ne voudrait pas non plus mettre les musées et les collectionneurs dans l'impossibilité d'acquérir des œuvres étrangères. Il ne peut s'agir que de chefs-d'œuvre, d'œuvres uniques, de précieux souvenirs historiques qui représentent pour ainsi dire un trésor national, et dont la perte serait irréparable.

S'il n'est pas admissible d'exporter un pareil objet sans le consentement de l'autorité supérieure, il n'est pas permis non plus de le faire disparaître. Il existe de riches amateurs qui, jaloux de leurs acquisitions, les enferment et ne les montrent qu'à leurs intimes. Mais il ne faut pas oublier qu'un chef-d'œuvre d'art n'est pas destiné seulement au plaisir de quelques privilégiés ; il doit servir aussi à l'étude des jeunes artistes qui voudraient s'inspirer du génie du maître. C'est pourquoi ces œuvres doivent rester accessibles au public, sinon à la grande foule des curieux, du moins à tous ceux qu'amène un intérêt supérieur. S'il n'y a pas d'inconvénient à ouvrir les portes des palais et des châteaux domaniaux au public, on peut exiger que les anciens immeubles et les collections d'art ou d'histoire appartenant à des particuliers puissent également être visités. De cette façon, il s'exercerait un certain contrôle du public à côté de la surveillance que l'Etat doit se réserver pour prohiber toute contravention et pour faire valoir ses droits en temps utile.

Pour faire face à tant de charges, l'Etat doit avoir à sa disposition un crédit porté chaque année au budget. En dehors des frais d'administration pour le service du contrôle, il faudrait une somme beaucoup plus élevée que celle prévue actuellement dans la plupart des budgets, non seulement pour l'entretien et l'achat d'immeubles ou d'objets d'art, mais aussi pour subvenir aux corporations ou établissements incapables de supporter seuls les dépenses de la conservation de leurs monuments. Car c'est en dernier lieu le trésor public qui doit venir à leur aide.

Le moyen le plus puissant de protéger les monuments

historiques serait, sans doute, d'intéresser le public. Il faut espérer que l'idée de la conservation gagnera toutes les classes de la population, et tous les efforts tendant à répandre cette idée doivent être encouragés. Les sociétés archéologiques et artistiques qui existent partout sous différents noms et les journaux créés en vue d'éclairer le public sur les intentions et les vues des amis des monuments ont préparé le terrain. On a rapporté au dernier Congrès qu'en Belgique il existe des villes qui se préoccupent non seulement de conserver les monuments, mais encore de conserver des ensembles de monuments. Dans la plupart des autres pays on est loin de cet idéal. Il faudra se tenir pour content si, par les simples mesures législatives que nous avons indiquées, on parvient à protéger les monuments contre le vandalisme de ceux qui veulent tout sacrifier aux besoins de la vie moderne.

Proposition de M. le Baron Henry de Geymüller de Baden-Baden. Correspondant de l'Institut de France.

1° Chercher à obtenir des gouvernements des différents pays que dans toutes les écoles pour architectes et ingénieurs, ainsi que dans les établissements où l'on enseigne la construction, les arts décoratifs ou du bâtiment en général, aucun diplôme, brevet ou certificat ne soit délivré, à moins que l'élève n'ait justifié d'avoir assisté à une séance spéciale et annuelle de l'École, ayant trait au respect dû aux monuments historiques considérés au double point de vue des :

- (a) Trésors du patrimoine national ;
- (b) Jalons authentiques du développement de l'architecture au point de vue de l'esthétique et des procédés techniques.

On lirait ensuite aux élèves quelque chose d'analogue ou d'identique aux deux Instructions que l'Institut Royal des Architectes Britanniques a publiées en 1865 et révisées en 1888, dont la lecture dure vingt-sept minutes environ. Ils ont pour titre :

- (c) *Conseils généraux aux promoteurs de restaurations ;*
- (d) *Indications pour ouvriers employés à la réparation et à la restauration d'édifices anciens.*

2° Prier les différentes sociétés d'architectes et d'ingénieurs de faire leur possible afin de répandre ces notions comme le fait le dit Institut Royal des Architectes Britanniques, en réimprimant toujours les deux susdites "Instructions" dans l'Annuaire qu'il publie annuellement.

Au Congrès des Architectes à Paris en 1889, M. de Geymüller avait déjà esquissé cette proposition, mais, faute de temps, elle n'aboutit pas. Sur sa proposition, la Société pour la Conservation des Monuments historiques Suisse a adopté cette idée et a publié des Instructions analogues.

Cette mesure n'empiète nullement sur le domaine des Institutions pour la Conservation des Monuments historiques, elle leur vient simplement en aide.

Visit of Architects to Paris.

Mr. Isaac Taylor, Hon. Secretary of the Education Committee of the Manchester Society of Architects, is arranging a visit of members of his Society to Paris, under the conduct of the tourist managers, Messrs. Dean & Dawson. The visit is to last a week, commencing on Saturday, the 15th September, and concluding the following Saturday. M. Poupinel, Secretary of the Société Centrale, has kindly offered to meet the visitors in Paris. Mr. Taylor writes that the Society would be much honoured if any members of the Institute would join their party. The inclusive fare is £6. 19s., and includes travelling expenses, hotel accommodation and meals, carriage drives, &c. Programmes

of the tour may be obtained from Messrs. Dean & Dawson, 55 Charing Cross, Trafalgar Square, or branches. Members wishing to join the party should send in their names to Mr. Isaac Taylor, 7 Chapel Walk, Manchester, not later than the 30th August.

The late Duke of Saxe-Coburg and Gotha

[Hon. Fellow].

On behalf of the Royal Institute the following message of condolence was addressed to Her Majesty the Queen on her recent bereavement, and forwarded through the Home Secretary:—

The Respectful Address of the President and Council on behalf of The Royal Institute of British Architects.

May it please your Majesty,—

We beg leave respectfully to approach your Majesty and to tender our deepest sympathy on the irreparable loss which your Majesty has sustained by the sudden death of his Royal Highness the Duke of Saxe-Coburg and Gotha.

We in common with your Majesty's most dutiful subjects desire to join in the universal tribute of affection and loyalty which has been offered to your Majesty and the Royal Family, and in the prayer for Divine support in a time of such sad bereavement.

On behalf of the Royal Institute of British Architects,

WM. EMERSON, *President.*

ALEX. GRAHAM, *Hon. Secretary.*

The Duke of Saxe-Coburg and Gotha was elected an Honorary Fellow of the Institute in 1879.

The late John Humphreys Jones, whose death was recently announced in the *Times*, was the father of the Associate of the Institute who bears the same name, and of Mr. Harry E. Jones [A.]. The deceased gentleman retired from practice fifteen years ago.

REVIEWS.

TEWKESBURY AND DEERHURST.

The Abbey Church of Tewkesbury, with some account of the Priory Church of Deerhurst, Gloucestershire. By H. J. L. J. Massé, M.A. 80. Lond. 1900. Price 1s. 6d. [Messrs. George Bell & Sons, 1 York Street, Covent Garden, W.C.]

This handy little volume, forming the latest addition to Messrs. George Bell & Sons' "Cathedral Series," should be welcomed equally by the general public and the technical student or antiquary. Within a modest compass it offers a veritable compendium of well-selected matter, architectural and historical, concerning the interesting, and in many respects unique, buildings at Tewkesbury and Deerhurst.

The Abbey Church of Tewkesbury is of most ancient date, tradition pointing to the foundation of a chapel in 655 A.D.

The oldest portions of the present church date back to 1123, and most of the fabric may be assigned to this period. The groined stone roofs were substituted for earlier wooden ceilings in the fourteenth century, and the upper part of the choir was rebuilt in the time of Abbot Parker—1389-1421—when the beautiful apsidal chapels were added. The fourteenth-century glass in the choir lights is some of the most perfect remaining to us. Most fortunately, through lack of funds it was not interfered with during the earlier restorations.

The author devotes his first chapter to a concise chronicle of the history of the fabric, its foundation, its structural changes and vicissitudes, arranging his facts in a clear and readable manner, and the extracts he gives in the later years of the chronicle are of special interest.

That the fabric has been so well preserved as a whole is due to the enthusiastic love of the good people of Tewkesbury for their church, which led them to petition the King's Commissioners at the Dissolution for its purchase. This they effected at a cost of £453—the value of the lead and the bells—no doubt a sufficiently heavy tax upon their resources.

A clear historical description first of the exterior of the building, and afterwards of the interior, follows. Mr. Massé takes his readers systematically around the building, pointing out in turn each feature of interest, omitting no detail of importance.

It seems a great pity that the private ownership of the grounds on the east of the abbey should have proved so great an obstacle to antiquarian research, and should have rendered it impossible to restore the lady chapel, or even to ascertain its foundations. The restorations effected in 1864-79, under Sir Gilbert Scott, and the previous restorations in 1824-30 are, on the whole, sympathetically described. Much of the earlier restoration work would seem to have been done with care and reverence.

The modern glass is severely criticised, also the shiny tiled pavements, which are of formal design.

It may be a matter of regret to many that the beautiful old organ, dating from 1737, no longer occupies its former position of dignity, but is relegated to the south transept. The screen on which it stood was an eyesore, however, and its disappearance was a matter for congratulation.

Much yet remains to be done in the restoration of the glorious monuments and chantries, of which several good photographs are provided in this volume.

The author completes his notice of Tewkesbury with references to the new "Grove" organ, a

wonderful instrument, fitted with many novel stops; also notices of the church plate, the registers—which date from 1554—and a list of abbots from 1102 to the Dissolution.

Deerhurst Priory.—The second part of the volume is devoted to a careful description of this very ancient and remarkable church. The building claims an authentic origin as early as the ninth century, and is probably earlier, and the Saxon tower is still fairly perfect. Here, as at Tewkesbury, the nave seems to have been originally the Parish Church, and the choir and transepts for the priory use.

The church contains work of all dates, which is well described, and will prove a valuable help to the student. Several obscure features are noted and explanations given where possible. The remarkable font, with its beautiful ninth-century detail, of Celtic character, is the subject of an illustration.

Plans are given both of the church as it is at present, the different dates being clearly shown, and also of the pre-Norman church, with its apsidal termination (traces of which are still to be found). A section of the church is also given showing the living rooms which, in Saxon days, were wont to be formed over the churches.

The adjacent monastic buildings, which present features of interest, have attention; and a chapter, illustrated with some good photographs, is given to the recently discovered Saxon chapel, to which an inscribed stone in the Ashmolean Museum was found to refer, showing it to have been built by Duke Odda in 1056 A.D.

Generally, this little volume should be commended for the large amount of valuable matter it contains, no less than for its lucidity and readable nature. The illustrations are abundant, and are chiefly from photographs, of which the majority are good, but some show a want of brilliancy. There are reproductions of two of the Rev. J. L. Petit's sketches in his characteristic style.

Bristol.

F. BLIGH BOND.

DOMES.

The Dome as the basis of an Architectural System. By Arthur T. Bolton.

It would be difficult to name any sort or style of work mention of which does not raise before the mind's eye some type representative of the whole. So at the word "dome" one's thoughts fly to Constantinople, or Rome, or Florence—to the greatest achievements of architectural genius.

Mr. Bolton, however, does not deal with any one dome of the first importance either as a covering for a great space or as a single feature—those with which he deals varying generally from thirty to fifty feet in diameter—and he may be said to have disregarded external effect completely, though the satisfactory combination of

line and curve inside and out has been one of the standing problems for builders of domes from the beginning. But he disclaims any intention of dealing with his subject from the point of view of a single and predominant feature, and, in turning his attention to the systematic and connected use of domical forms as a principle of design rather than as a method of constructive roofing, and of internal grouping and decorative line rather than of external architecture, he has performed a most useful and suggestive work.

The paper is one of those careful excursions into by-paths of history which not infrequently remain unexplored by the scholar owing to the attraction of greater kindred subjects, but which in the history of architecture often present studies instinct with poetry and idealism, and possess a claim upon the student from the very fact that their teaching bears so closely upon the questions with which he has to busy himself in every-day practice.

The different forms of plan and section shown in the diagrams are many of them of considerable interest, and, so far as personal investigation goes, are drawn chiefly from Italy, and the examples described are well selected and collated. Such a series as S. Giustina, Padua, S. Fedele, Milan, the two churches at Viterbo, between which the author draws an apt comparison, S. Alessandro, Milan, and the Chiesa del Madonna, Macereto, Sta. Maria del Prato, Gubbio, and Madonna di S. Luca, Bologna, is a most interesting one, especially with regard to plan.

The sketch of the general development places clearly before the reader the modifications which experience suggested in dealing with the domical form as one of a series of internal features, and it is not too much to hope that further developments are possible, for it must be confessed that as used hitherto the dome has proved itself more suited to a concentrated than an elongated form of building, to the type whose perfected form is found at S. Sophia than to that of, say, S. Giustina at Padua. Mr. Bolton's "Five Domed Church" may be a more satisfactory basis of design than his "Domical Church." The application of a series of circular openings in a nave of Gothic form, even when lowered to the fullest extent consistent with the dignity of the dome, is a difficult matter, and possibly the author will admit that he has not seen the problem successfully solved either in Renaissance examples or in those of other ages, such as the fine series of domed churches to be found in France of the eleventh and twelfth centuries. A comparison between these two classes would be interesting, though modern development would probably follow the lines of Mr. Bolton's studies rather than the lessons to be learnt at Angoulême or Fontevault.

Manchester.

PERCY S. WORTHINGTON.

LAUNDRIES.

The Steam Laundry: Its Construction, Equipment, and Management. By John Taylor, A.I.M.E., &c. Sm. 8o. [Lond. 1900. Messrs. Heywood & Co., 150 Holborn, E.C.]

This volume will undoubtedly be found very useful to managers and proprietors of small laundries, for whom it has evidently been written. Although the architect may find some useful hints in the book, the greater portion deals with matters entirely outside his province. Only the first few pages are devoted to "Construction," which subject is treated in a general way as regards site, subsoil, water supply, &c. The author strongly advocates the employment of the best materials only—a truism not always grasped by clients. Part II. deals with "Equipment," and contains a useful and concise description of the various boilers, machines, &c., in general use, for various purposes. Part III., on "Management," contains a mass of information, such as the chemical analysis of soap, the prices usually charged for washing all kinds of garments, and the best methods of persuading customers to pay when the work is done. This is all interesting, but more useful to those connected with the trade than to architects. A small plan is shown as a frontispiece of an ideal laundry "to wash £100 a week." This is very well arranged, and would work admirably in execution, on a site with light on all four sides. The author is evidently conversant with the subject in all its details, and a volume by him dealing with Public Laundries from a constructional, rather than commercial, point of view, would be most interesting.

R. STEPHEN AYLING.

NOTES, QUERIES, AND REPLIES.

Protection of Public Buildings from Lightning.

Supplementing his Paper on the above subject read before the Institute on the 23rd April last [p. 285 ante], Mr. Killingworth Hedges, M.Inst.C.E., sends the following description of the system of lightning conductors which he designed for the protection of St. Paul's Cathedral:—

The usual arrangement of lightning conductors is very much the same in principle as that adopted fifty years ago. One or more conductors, either of stranded wire or of flat ribbon, are run from the air terminals or collection of spikes to the earth, and joints are made to other conductors either by junction-pieces furnished with set screws or by splicing the cables together.

These methods of jointing are open to the very grave objection that in a short time oxidation of the surface in contact will be sure to occur, and instead of a perfect electrical joint, resistance is set up, which means that if one of the conductors receives a flash, the electric current may be

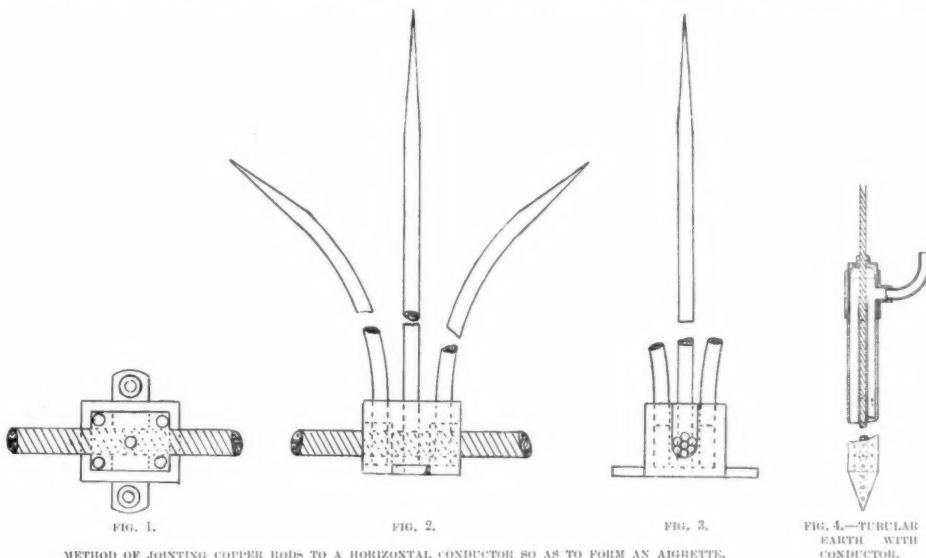
diverted to any moderately good conductor, such as a rain-water gutter or a pipe, which happens to be in the vicinity.

Soldering all joints renders the work perfect for a time, but experience shows that the expansion and contraction of a soldered joint, say between two stranded conductors, will become loose in about ten years (more or less) according to its situation, and cannot in any sense of the word be termed a permanent joint.

Earths.—In some installations the earth is formed by simply burying a piece of cable, generally twisted up in the form of a spiral; this method is condemned in the Report of the Lightning-rod Conference, and most contractors use an earth-plate, but even then the connection

Joints.—These are made by boxes tinned inside, and can be used for tee, two-way, or ordinary joints, and are furnished with lugs, screws, or straps, so that they can be fixed in almost any position on the roof or other parts of the building. The joint is made by pouring solder over the loosely-spliced conductors which are laid in the box; it is unnecessary to have an open fire or blow-flame lamp on the roof, as the plumber's pot containing the solder may be hoisted from the ground.

Aigrettes.—When a horizontal conductor is used it is often desirable to have one or more projecting spikes; they are very easily fixed to the conductor in the following manner (figs. 1, 2, 3). The conductor having been well cleaned is dropped



to the plate is often so insecure that after a few years the conductor, if not entirely separated, probably becomes quite loose.

It was with a knowledge of these defects in the existing methods that Mr. Killingworth Hedges, when asked to re-arrange the system of lightning conductors of St. Paul's Cathedral, resolved, where joints were necessary, to have those which would last as long as the other parts of the system; also a permanent earth-connection which could be led to moist ground, at a much greater depth than would be practicable with earth-plates.

Finding that there was nothing in the trade catalogues which met his requirements, he has invented and designed a complete set of what may be termed "lightning contractors' accessories"—namely, air terminals, jointing boxes, and a new tubular earth-connection.

across the slots, the desired number of rods are placed in the pockets or holes in the box, and molten solder is poured into the box so that the whole becomes a solid mass which cannot be interfered with, and thus forming a protected joint of minimum resistance to the electric circuit. Fig. 1 is a plan of an aigrette showing four terminals, fig. 2 a side view, and fig. 3 an end view.

Air Terminals.—These are constructed by prolonging a solid copper pointed rod, which is united to the conductor by soldering both into a box sleeve-joint, the former being actually inserted into the strands of the cable; pockets in the circular box receive the points, which are fixed to the central rod by filling the box with solder.

The usual method of screwing the spikes to a ball is open to the objection that in a short time the conductivity is liable to be destroyed.

Earths.—The ordinary earth-plate to be efficient must be of considerable area, and it is often difficult to place this at the depth which is necessary to obtain moist ground. Mr. Hedges has therefore designed what is termed a *tubular earth* (fig. 4). A specially constructed iron pipe 1½ in. to 2½ in. diameter is perforated at the lower end and furnished with a spike; this is driven by special tackle into the ground, other lengths being screwed on until the required depth is attained. The conductor is passed through a metal cap and dropped down the tube, which is now closed by the cap to which the cable is soldered; a branch pipe can be led from the top so that the earth may be watered.

This system of tubular earth offers practically no electrical resistance; it takes up hardly any room, so that if the building is surrounded by concrete it is only necessary to cut a very small hole to allow for sinking the tube; it also has the great advantage of being easily removed should some obstruction be met with, or if suitable ground is not found. It is estimated that there is a saving in first cost by using the iron tube instead of the expensive copper earth-plate. The various improvements are protected by letters patent.

The University of London and the Higher Education of Architects [p. 431].

From Professor ROGER SMITH [F.]—

Referring to the interesting paper by Mr. Cates on the University of London, in the last issue of the JOURNAL, and especially to the last paragraph, which I hope readers will not take more in earnest than was intended by the writer, I should like to point out that there is no necessary connection between the reorganisation of the University of London or the incorporation with it of University and King's Colleges, and the establishment in England of a collegiate system of education for architects parallel to those in operation at some of the American Universities.

Such a system, if it ever grows up here, will be established either because the need of more complete education for architects has become strongly felt, or because some new distinction can be obtained by ambitious and capable young men which could only be reached by a severe and prolonged course of study. Judging from what has happened in other professions, the second motive, namely, the desire to attain a coveted honour, is likely to be the stronger motive; and it is possible that the reorganisation of the University may furnish an opportunity for establishing such a distinction.

At present the highest distinction at which an architectural student aims is passing the qualifying examination of the Royal Institute, and the level at which that examination has been fixed is based, and very rightly based, upon an estimate of the degree of knowledge which a pupil in a

good office, with assistance from the existing College courses, is able to attain in a few years.

If a *degree* in Architecture is ever established, its level must necessarily be higher than that of the qualifying examination; and then, and not, I fancy, till then, such a demand for systematic instruction as does not appear to exist at present may spring up. This may have to be met by an extension of the programmes of the present colleges—or possibly by the establishment of a new college.

I presume that it is within the competence of the University as now constituted to establish a degree for Architects, and that such degree would be that of *B.Sc.—taken in Architecture*. This, of course, will not be done till it is asked for and pressed for; and if the Royal Institute or a Congress of Architects sees fit to memorialise the Council of the University on the subject, the first step towards what would undoubtedly forward the cause which Mr. Cates has at heart will have been taken.

University College, London.

LEGAL.

Ancient Lights : Obstruction : Limitation of Right acquired by Prescription.

WARREN AND OTHERS v. BROWN.

The judgment in this case contains an interesting summary of authoritative decisions on the extent of the right to light which is acquired by statutory prescription, and in view of the special interest attaching to the subject at the present moment it is here printed in full as likely to be of value for future reference. The case was tried at Leicester Assizes, before Mr. Justice Wright, when judgment was reserved. Mr. Hugo Young, Q.C., and Mr. W. H. Stevenson appeared for the plaintiffs; and Mr. Stanger, Q.C., and Mr. Neilson for the defendant. Mr. Justice Wright delivered judgment on the 4th August, and the following report is from *The Times* of the 6th.

His Lordship said:—This case raises a question of general importance in relation to ancient lights—namely, whether the right which is acquired by statutory prescription is a right to the continuance of substantially the whole quantity of light which has come to the windows during the twenty years, or is ordinarily limited to a sufficient quantity of light for all ordinary purposes of inhabitation or business. It seems strange that such a question should be still open for discussion, but there is a considerable body of authority in favour of either proposition. The facts are these. The plaintiffs, as the owners and the tenant of a building in the town of Leicester, claim damages and an injunction in respect of the obstruction of the access of light to windows more than twenty years old. At the trial the claim was limited to two rooms, one on the ground floor and the other above the former, both facing to the south. For a length of about 17 ft. in front of these rooms the defendant has raised his own building from a height of about 20½ ft. to about 26 ft., but has set it back about 2 ft. or 3 ft., so that the width of the street between the two buildings, which was about 17 ft., is now about 19 ft. Four out of five windows in each of the two rooms are opposite to that part of the defendant's building which I have mentioned. These windows are large and high. Those of them which are on the ground floor are, and for years have been, glazed with

fluted glass for about half their height from the bottom. In addition to the front light both rooms receive much side light, especially from the east and east-south-east, from a wide street running north and south at a distance of about 50 ft. to 70 ft. Light is not in any direction cut off by very high buildings. To the south-east the defendant has taken down a high chimney-stack, which to some extent used to intercept the light from that quarter. I find that the defendant has not obstructed or diminished to any material extent, if at all, the light coming to the upper of the two rooms in question. As regards the four windows on the ground floor, I find that the defendant has materially diminished the light which the plaintiffs enjoyed for those windows for twenty years past, but that abundant light remains for all ordinary purposes of inhabitation or business. The room in its present state is better lighted than the ground-floor rooms in many of the principal streets. The plaintiff Baum (the lessee of the premises) has during some years, but much less than twenty years, carried on in the premises, and particularly in the ground-floor room in question, a manufacture of hosiery by means of machinery which requires a very exceptional quantity and quality of light for the continued and accurate adjustment of filaments to fine needles moving at speed in bundles of some hundreds. Before this manufacture was established at these premises a different industry (manufacture of boots and shoes) requiring good, but not special or extraordinary, light was carried on there. I find that the defendant has by the acts complained of diminished the light so that it is now materially insufficient during some part of the day for the special requirements of the plaintiff Baum's industry. I find that the plaintiffs' premises have throughout the twenty years before action been suitable for such a manufacture as that now carried on by Baum, and that the kind of manufacture is and has long been common in the district, and has for twenty years past required more light than most other industries, but not until the last few years in so high a degree as at present, the older machines having been less delicate and complicated. I think that the light as it now exists would have been sufficient for any but the most recent kinds of machines. In my judgment no sufficient case for a mandatory injunction is made out in any view of the plaintiffs' rights. The inconvenience to which Baum was subjected can be, and to a great extent it has been, obviated by the removal of machines to the upper room, and in any case it can be remedied by some increased expenditure for gas. The question is whether the plaintiffs are entitled to damages. If they are, I assess the amount at £100 for the tenant and £200 for the reversioners. There are scarcely any authorities bearing on the question until 1865. It appears from Aldred's case (9 Rep., 57a) that the nature of the cause of action in the case for infringement of rights to light was not clearly settled. It is classed with actions for nuisance, and the pleading closes with "quod messagium horrida tenebritate obscuratum fuit"; but a prescription is alleged. In Luttrell's case (4 Rep., 86a) it is laid down that (as was afterwards established by *Yates v. Jack* (L.R., 1 Ch., 295) and other cases), "if a man has an old window to his hall and afterwards he converts the hall into a parlour or any other use, yet it is not lawful for his neighbour to stop it, for he shall prescribe to have the light in such part of his house." In 1752, in *Fishmongers' Company v. East India Company* (1 Dickens, 163), Lord Hardwicke said:—"It is not sufficient to say it will alter the plaintiff's lights, for then no vacant piece of ground could be built on in the city; and here will be 17 ft. distance, and the law says it must be so near as to be a nuisance. It is true the value of the plaintiff's house may be reduced by rendering the prospect less pleasant, but that is no reason to hinder a man from building on his own ground." In *Martin v. Goble* (1 Camp., 320) a malt-house with ancient windows

was occupied for seven years as a poor-house. McDonald, C.B., directed the jury that "the house was entitled to the degree of light necessary for a malt-house, not for a dwelling-house. The converting it from one into the other could not affect the rights of the owners of the adjoining ground. No man could by any acts of his suddenly impose a new restriction upon his neighbours." In *Attorney-General v. Nichol* (1809, 16 Ves., 338), Lord Eldon (Lord Chancellor) says:—"There are many obvious cases of new buildings darkening those opposite to them, but not in such a degree that an injunction could be maintained, or an action upon the case; which, however, might be maintained in many cases which would not support an injunction." In *Back v. Stacey* (1826, 2 C. and P., 465) Chief Justice Best directed the jury that in order to ground an action there must be a substantial privation of light sufficient to render the occupation of the house uncomfortable and to prevent the plaintiff from carrying on his accustomed business (that of a grocer) as beneficially as he had formerly done. In the forty years after *Back v. Stacey* there seem to have been few or no decisions bearing on the question; but in 1865, in *Clarke v. Clark* (1 Ch., 16), the question was distinctly raised for the first time. Then Lord Cranworth refused an injunction in a case in which exceptionally good light had been materially diminished, saying that the plaintiff must show such an obstruction "as to interfere with the ordinary occupations of life." He proceeded to draw a distinction between town and country, which has not been fully adopted in later cases. In *Durrell v. Pritchard* (1865, 1 Ch., 244) and *Robson v. Whittingham* (1 Ch., 442), Lords Justices Knight-Bruce and Turner adopted the language of Lord Cranworth. In *Yates v. Jack* (1866, 1 Ch., 295) Lord Cranworth established the rule, which has ever since that case been recognised as settled, so far, at any rate, as ordinary purposes of inhabitation or business are concerned, that the owner of ancient lights is entitled to have them protected without reference to the particular purpose for which they were enjoyed during the twenty years; and he does not apparently draw any distinction between ordinary and extraordinary purposes. In the same year, in *Dent v. Auction Mart Company* (2 Eq., 238), Vice-Chancellor Wood established another rule that an injunction would not be granted in equity unless the case is a proper one for substantial damages at law. Having referred to *Martin v. Headon* (2 Eq., 425) and *Calcraft v. Thompson* (15 W.R., 387), his Lordship proceeded:—"In *Lanfranchi v. Mackenzie* (4 Eq., 421) it was held by Vice-Chancellor Malins that where ancient windows had received an extraordinary amount of light during the twenty years and the plaintiff had used it for a purpose requiring extraordinary light (examination of silks) for only a portion of that period, he had no right to an injunction on the ground of an obstruction which left him enough light for all ordinary purposes, though not enough for extraordinary purposes. He thought, however, that if the plaintiff had been 'in the enjoyment of an extraordinary user for twenty years, that would establish the right against all persons who had reasonable knowledge of it.' In 1871, in *Kelk v. Pearson* (6 Ch., 809), Lord Justice James said:—"On the part of the plaintiff it was argued before us that this was an absolute right, that now, under the statute 2 and 3 William IV., c. 71, he had an absolute and indefeasible right by way of property to the whole amount of light and air which came through the windows into his house, and that he could maintain an action at law or a suit in equity upon that absolute legal right; and the only question as to the effect or extent of his right would be with regard to the discretion of this Court in considering whether it was a case for damages, or to be interfered with by way of injunction. Now, I am of opinion that the statute has in no degree whatever altered the pre-existing law as to the nature and extent of this

right. The nature and extent of the right before that statute was to have that amount of light through the windows of the house which was sufficient, according to the ordinary notions of mankind, for the comfortable use and enjoyment of that house as a dwelling-house, if it were a dwelling-house, or for the beneficial use and occupation of the house, if it were a warehouse, a shop, or other place of business. That was the extent of the easement—a right to prevent your neighbour from building upon his land so as to obstruct the access of sufficient light and air to such an extent as to render the house substantially less comfortable and enjoyable." Lord Justice Mellish concurred, but dissented from that part of Lord Cranworth's judgment in *Clarke v. Clark* which suggested a possible difference between town and country. In 1873, in *Dickinson v. Harbottle* (28 L.T., 166), Vice-Chancellor Malins followed his own decision in *Lanfranchi v. Mackenzie*. The question was again raised in the Court of Appeal in *City of London Brewery Company v. Tennant* (9 Ch., 212) before Lord Selborne (Lord Chancellor) and Lords Justices James and Mellish. Lord Justice James said:—"In the case of *Kelk v. Pearson* the Lord Justice and myself endeavoured to express what we thought to be the rule applicable to these cases, and I believe the Lord Chancellor entirely agrees with the mode in which it is there expressed. We only repeated in different words what is to be found in many previous cases—that the extent of the right of an owner of ancient lights is to prevent his neighbour from building so as to obstruct the access of sufficient light and to such an extent as to render the house substantially less comfortable and enjoyable." Lord Selborne (Lord Chancellor) said, "I agree with the judgment which Lord Justice James has delivered," expressly adhering to the language in *Kelk v. Pearson*, and adding that the supposed rule as to 45 degrees is no rule of law, but that if 45 degrees of light is left that is some *prima facie* evidence of the light not being obstructed to such an extent as to call for the interference of the Court. In *Leech v. Schweder* (1874, 9 Ch., 463) Lords Justices James and Mellish held that there was no difference in extent and nature between the right acquired under the statute and a right acquired by "the disposition of the owner of two tenements," and that "practically there is no difference with respect to light in the amount of damage which would entitle a person to maintain an action at law and that which would entitle him to file a bill in equity." In *Aynsley v. Glover* (1874, 18 Eq., 515; 10 Ch., 283), per G. Jessel (Master of the Rolls), it was finally settled that the right to light for a room is not limited by the fact that before the obstruction the room was used for purposes requiring little of the light which came to it, and *Back v. Stacey*, as amended by Vice-Chancellor Wood, is approved; but the case does not seem to contain anything affecting the present question, nor are there any criticisms on *Kelk v. Pearson* or *City of London Brewery Company v. Tennant*. There are no subsequent reported decisions of the Court of Appeal which are in point, and the last-mentioned decision of that Court would, as I understand it, be decisive of the matter, subject only to review in the Court of Final Appeal. This view, however, seems not to have been universally adopted, a different view having been apparently taken by the Court of Appeal in Ireland, by the whole or a majority of a Divisional Court in England, and in two or three cases by my brother Kekewich. His Lordship then referred to *Moore v. Hall* (1878, 3 Q.B.D., 178), in which Mr. Justice Mellor and Mr. Justice Manisty appear to have held that the plaintiff's right is to have the light flow in the same quantity as through the period of prescription; to *Mackay v. Scottish Widows Society* (1877, 11 Ir. R., Eq., 1), in which Lord Justice Christian laid it down that "the right is to an average *maximum* of the light which nature has been shedding on the window for twenty years before the

defendant interrupted it"; and to *Lazarus v. Artistic Photographic Company* (1897, 2 Ch., 214), in which Mr. Justice Kekewich held that the plaintiff was entitled to be protected in the enjoyment of extraordinary light for photographic purposes, although he had not been using it for those or other purposes requiring extraordinary light for the full period of twenty years. His Lordship proceeded: In this state of the authorities I think I must take it that the law is laid down in *City of London Brewery Company v. Tennant*, agreeing as that case does with the criterion expressed by Lord Cranworth in *Clarke v. Clark*, and that the plaintiffs, having an abundance of light left for all ordinary purposes of inhabitancy or business, are not entitled to relief on the ground that their extraordinary use has been interfered with. Unless, indeed, there is some such limitation of the right to light for ancient windows it is difficult, as Lord Hardwicke observed in effect in *Fishmongers Company v. East India Company*, to see how the ordinary extensions and improvements of towns could be carried on. If every house which has existed for twenty years is entitled to have all, or substantially all, the same light come to its windows as during the twenty years, no new houses could be built opposite to old ones unless at a distance which would impose on servient tenements an unreasonable burden, and might involve grave public inconveniences. Nor, if that were law, could there well be any presumption that so long as 45 degrees of light, or some approximate angle, is left there is no actionable wrong. It is not necessary in the present case to consider the question raised in *Lanfranchi v. Mackenzie*, whether a right to an extraordinary quantity of light for extraordinary purposes can be acquired by prescription.

Judgment was accordingly entered for the defendant with costs.

London Building Act: What is a Public Building?

At Lambeth Police Court, on 17th July, before Mr. Hopkins, Mr. Priestman Moses was summoned by Mr. Ellis Marsland, district surveyor for Camberwell, for failing to comply with a notice of irregularity served upon him under the terms of the London Building Act 1894. In April 1897 the Local Government Board made an order giving the control of children of defective intellect or physical infirmity to the Metropolitan Asylums Board. The Board came to the conclusion that the most effectual way of dealing with such children would be to locate them in different parts of London in small homes in close proximity to the centres at which the London School Board provide special instruction for such children. In pursuance of that decision the Board purchased a house in Elm Grove, Peckham, and proposed to make alterations and additions with the view of adapting it for the accommodation of fourteen or fifteen children. In carrying out this work the architect (Mr. Charles Henman) proposed to retain the original wooden staircase and to place an outside iron staircase as a means of escape from fire. Mr. Marsland, the district surveyor, took the view, however, that this was the conversion of a house into a public building, and that consequently the terms of section 68 of the London Building Act 1894 applied. That section requires that in every public building the floors of the lobbies, corridors, passages, and landings, and also the flights of stairs, shall be of fire-resisting material and carried by supports of a fire-resisting material.—Mr. Herbert Smith, for the defendant, argued that this was not a public building, and that in regard to this dwelling-house the Board were in the same position as a private owner.—In the result Mr. Hopkins upheld the district surveyor's contention and made an order requiring the defendant to amend the work in accordance with his (the surveyor's) requirements, but agreed to state a special case for the opinion of the High Court of Justice.

